

*Zoological Record*

Vol. 92, Sect. 10, 1955

# CRUSTACEA

COMPILED BY

J. P. HARDING, Ph. D.

AND

R. W. INGLE

LONDON

PUBLISHED BY

THE ZOOLOGICAL SOCIETY OF LONDON

---

PRICE SIX SHILLINGS AND SIXPENCE

SEPTEMBER 1957

# SEPARATE SECTIONS OF THE ZOOLOGICAL RECORD

---

In addition to the complete bound volume, the separate Sections may be obtained singly, bound in printed paper covers.

The following are the Sections and their prices, viz. :—

				<i>s.</i>	<i>d.</i>
1.	Comprehensive Zoology	...	...	3	0
2.	Protozoa	...	...	10	0
3.	Porifera	...	...	2	0
4.	Coelenterata	...	...	4	0
5.	Echinoderma	...	...	4	0
6.	Vermes	...	...	10	0
7.	Brachiopoda	...	...	4	0
8.	Bryozoa	...	...	2	6
9.	Mollusca	...	...	10	0
10.	Crustacea	...	...	6	6
11.	Trilobita	...	...	5	0
12.	Arachnida	...	...	10	0
*13.	Insecta	...	...	50	0
14.	Protochordata	...	...	2	0
15.	Pisces	...	...	8	6
16A.	Amphibia	...	...	6	0
16B.	Reptilia	...	...	7	6
17.	Aves	...	...	10	0
18.	Mammalia	...	...	10	0
19.	List of New Genera and Subgenera	...	...	4	0

\* Obtainable only from the Commonwealth Institute of Entomology, 56, Queen's Gate, London, S.W.7.

# 10. CRUSTACEA

COMPILED BY

J. P. HARDING, Ph. D.

AND

R. W. INGLE

## CONTENTS

	PAGE
I. TITLES	1
II. SUBJECT INDEX	38
General, p. 38 ; Structure, p. 38 ; Physiology, p. 39 ;	
Reproduction and Sex, p. 41 ; Development, p. 41 ;	
Evolution and Genetics, p. 42 ; Ecology and Habits, p. 42 ;	
Geographical Distribution, p. 44 ; Palaeontology, p. 47.	
III. SYSTEMATIC INDEX	48
Malacostraca, p. 48 ; Stomatopoda, p. 48 ; Decapoda, p.	
48 ; Amphipoda, p. 63 ; Isopoda, p. 69 ; Tanaidacea, p.	
74 ; Cumacea, p. 74 ; Mysidacea, p. 75 ; Thermos-	
baenacea, p. 76 ; Anaspidacea, p. 76 ; Bathynellacea, p.	
76 ; Nebaliacea, p. 76 ; Cirripedia, p. 76 ; Cephalo-	
carida, p. 78 ; Copepoda, p. 78 ; Branchiura, p. 86 ;	
Ostracoda, p. 86 ; Branchiopoda, p. 92.	

### I—TITLES

#### Direction 11.

Determination of the gender to be attributed to the names of one hundred and seventy four genera of the order Decapoda (Class Crustacea) placed on the *Official list of generic names in Zoology* in the period up to the end of 1936. Opin. int. Comm. zool. Nom. **1C** 1955 : 15–34.

#### Direction 12.

Validation under the plenary powers of the generic name *Astacus* Fabricius, 1775 (Class Crustacea, Order Decapoda) (correction of an erroneous entry made in the *Official list of generic*

*names in Zoology* by the ruling given in *Opinion* 104. Opin. int. Comm. zool. Nom. **1C** 1955 : 35–56.

#### Direction 15.

Correction of an erroneous entry on the *Official list of generic names in Zoology* relating to the generic name *Penaeus* (emend. of *Peneus*) Weber, 1795 (Class Crustacea, Order Decapoda) (correction of an error in *Opinion* 104). Opin. int. Comm. zool. Nom. **1C** 1955 : 67–80.

#### Direction 25.

Validation, under the plenary powers, of the generic name *Favus* Lanchester, 1900 (Class Crustacea,



Order Decapoda) (validation of an erroneous entry on the *Official list of generic names in Zoology* made by the Ruling given in *Opinion* 73. *Opin. int. Comm. zool. Nom.* **1C** 1955 : 247-258.

### Opinion 332.

Rejection for nomenclatorial purposes of the work by William Borlase entitled *The Natural History of Cornwall* published in 1758. *Opin. int. Comm. zool. Nom.* **9** 1955 : 355-368.

### Opinion 359.

Suppression, under the plenary powers, of the generic name *Miersia* Kingsley, 1879, for the purpose of rendering the generic name *Acanthephyra* Milne Edwards (A.) 1881 (Class Crustacea, Order Decapoda) the oldest available name for the genus concerned. *Opin. int. Comm. zool. Nom.* **11** 1955 : 139-150.

### Opinion 369.

Suppression under the plenary powers of the generic names *Tylos* Meigen 1800 (Class Insecta, Order Diptera) and *Tylos* Heyden 1826 (Class Arachnida) and validation thereby of the generic names *Tylos* Audouin (1826) (Class Crustacea, Order Isopoda) and *Micropeza* Meigen 1803 (Class Insecta, Order Diptera). *Opin. int. Comm. zool. Nom.* **11** 1955 : 265-300.

**Adams, J. R.** *see* Bangham, R. V. & Adams, J. P.

**Aguesse, P.** Liste des cladocères nouveaux pour la Camargue. *Terre et la Vie* **102** 1955 : 313-314.

**Ahmad, N.** Prawn Fishery of East Pakistan. [Abstract]. *Proc. Indo-Pacif. Fish. Council.* **5** 1955 : 156.

**Aikawa, H.** and **Isobe, K.** On the first larva of *Parribacus ursus-major* (Herbst). *Rec. oceanogr. Wks. Japan* **2** 2 1955 : 113-119 3 figs.

**Alexandrowicz, J. S.** Innervation of the heart of *Praunus flexuosus* (Mysidacea). *J. Mar. biol. Ass. U.K.* **34** 1955 : 47-53 1 pl. 1 fig.

**Ali, J. A., L.** Hunting the land crab *Paratellphusa guerini* (M. Edw.). *J. Bombay nat. Hist. Soc.* **52** 1955 : 941-945 1 fig.

**Altevogt, R. (1).** Some studies on two species of Indian fiddler crabs, *Uca marionis nitidus* (Dana) and *U. annulipes* (Latr.). *J. Bombay nat. Hist. Soc.* **52** 1955 : 702-716 5 pls. figs.

**Altevogt, R. (2).** Beobachtungen und Untersuchungen an indischen Winkerkrabben. *Z. morph. Ökol.* **43** 1955 : 501-522 13 figs.

**Alverson, F. G.** *see* Menzies, R. J., Bowman, T. E. & Alverson, F. G.

**Anderson, W. W.** and **Linder, M. J.** A Provisional Key to the Shrimps of the Family Penaeidae with especial references to American Forms. *Trans. Amer. Fish. Soc.* 1943 (1945) **73** : 285-319.

**Andreae, J. C.** Some observations on the larval development of *Cyclops leuckarti* Claus and *Cyclops hyalinus* Rehberg. *Zool. Meded.* **33** 1955 : 283-298.

**Angelescu, V.** *see* Popovici, Z. & Angelescu, V.

**Anraku, M.** Copepods collected on the whaling grounds off northern Japan and around Bonin Islands. *Bull. Fac. Fish. Hokkaido Univ.* **5** 1954 : 1-8.

**Anraku, M.** *see* Motoda, S. & Anraku, M.

**Araki, T.** Further studies on the effect of light on the *Cypridina* luciferin. *Annot. zool. jap.* **28** 1955 : 53-60 1 fig.

**Arcangeli, A.** Considerazioni sopra il cosiddetto "Coxopodita" dei pereopodi dei crustacei isopodi terrestre. *Atti Accad. Torino. Cl. Sci. fiz. mat. e nat.* **89** 2 1955 : 359-367.

**Attardo, C.** Contribuzione al problema dell'iperparassitismo: annotazione sulla biologia, la determinazione del sesso, l'involutione di *Cabirops marsupialis* (Caroli) iperparassita di *Hippolyte viridis*. *Riv. Biol. N.S.* **47** 2 1955 : 109-138 21 figs. [English summary].

**Băcescu, M.** *Rhithropanopeus harrisi* tridentatus (Maitland) un crabe américain ayant récemment pénétré et acclimaté dans les eaux saumâtres du Razelm. *Bul. sti. Acad. Repub. rom. Sect. Biol., etc.* **4** 3 1952 : 571-578 4 figs. [French résumé].

**Bachmayer, F.** Die fossilen Asseln aus den Oberjuraschichten von Ernstbrunn in Niederösterreich und von Stramberg in Mähren. S.B. öst. Akad. Wiss. Abt. I **164** 1955 : 255-273 6 pls. 9 figs.

**Bahamonde, N.** Hallago de una especie nueva de *Heterocarpus* en aguas chilenas : *H. reedi* n. sp. Invest. zool. chil. **2** 1955 : 105-114 4 figs.

**Baker, A. de C.** The circumpolar continuity of Antarctic plankton species. Discovery Rep. **27** 1954 : 201-218 5 text-figs.

**Baker, J. R.** Experiments on the humane killing of crabs. J. Mar. biol. Ass. U.K. **34** 1955 : 15-24 2 pls.

**Balcells, E.** see Margalef, R. & Balcells, E.

**Balesdent-Marquet, M.-L.** Castration temporaire aux rayons X et déterminisme des caractères sexuels temporaires chez le crustacé isopode *Asellus aquaticus* L. C.R. Acad. Sci. Paris **240** 1955 : 1275-1277.

**Balesdent-Marquet, M.-L. (2).** Influence de la température sur la mue, l'activité ovarienne et les caractères sexuels temporaires du crustacé isopode *Asellus aquaticus*. C.R. Acad. Sci. Paris **240** 1955 : 1372-1374.

**Balesdent-Marquet, M.-L. (3).** Irradiations localisées aux rayons X et déterminisme des caractères sexuels temporaires chez le crustacé isopode *Asellus aquaticus* L. femelle. C.R. Acad. Sci. Paris **241** 1955 : 609-611.

**Balesdent-Marquet, M.-L.** see Veillet, A., Lenel, R. & Vernet-Cornubert, G.

**Balss, H.** Decapoda. Bronns Klassen **5** Abt. 1 Buch **7** 1955 : 1285-1367 26 figs.

**Bănărescu, P. and Șerban, M.** Nota preliminară asupra copepodelor diaptomide ale faunei Române. Bul. Inst. Cercet. Pisc. **1, 3** 1954 : No. 3 : 39-52 10 text figs.

**Bingham, R. V. and Adams, J. R.** A survey of the parasites of freshwater fishes from the mainland of British Columbia. J. Fish. Res. Bd. Canada **11** (6) 1954 : 673-708.

**Bardach, J. F.** Plankton Crustacea from the Thelon watershed, N.W.T.

Canad. Fld. Nat. **68** 1954 : 47-52 2 figs.

**Barden, A. A.** see Meyer, M. C. & Barden, A. A.

**Barlow, J. P.** Physical and biological processes determining the distribution of zooplankton in a tidal estuary. Biol. Bull. Woods Hole **109** 1955 : 211-225 5 figs.

**Barnard, J. L. (1), (2).** A list of phoxocephalid amphipoda identified from samples of the benthos of San Pedro Basin California. Allen Hancock Pacif. Exped. **19** 1955 : 159-163.

**Barnard, J. L. (3).** Gammaridean amphipoda (Crustacea) in the collections of Bishop Museum. Bull. Bishop Mus., Honolulu No. **215** 1955 : 1-46 20 figs.

**Barnard, J. L. (4).** Notes on the Amphipod genus *Aruga* with the description of a new species. Bull. S. Calif. Acad. Sci. **54** 2 1955 : 97-103 3 pls.

**Barnard, J. L. (5).** Two new spongicolous amphipods (Crustacea) from California. Pacific Sci. **9** 1955 : 26-30 figs. 1-2.

**Barnard, J. L. (6).** The wood boring habits of *Chelura terebrans* Philippi : Los Angeles harbor. Essays in the nat. Sciences in Honor of Capt. A. Hancock. Los Angeles 1955 : 87-98 2 pls.

**Barnard, K. H. (1).** An addition to the faunal list of South African barnacles. Ann. Natal Mus. **13** 1955 : 247.

**Barnard, K. H. (2).** A new *Protojanira* from Natal (Isopoda, Asellota). Ann. Natal Mus. **13** 1955 : 249-251 1 fig.

**Barnard, K. H. (3).** South African parasitic Copepoda. Ann. S. Afr. Mus. **41** 1955 : 223-312 33 figs.

**Barnard, K. H. (4).** Additions to the fauna-list of South African Crustacea and Pycnogonida. Ann. S. Afr. Mus. **43** 1955 : 1-107 53 figs.

**Barnes, H. (1).** The growth rate of *Balanus balanoides* (L.). Oikos **6** 1955 : 109-113.

**Barnes, H. (2).** The hatching process of some barnacles. Oikos **6** 1955 : 114-123 16 figs.



**Barnes, H. (3).** Further observations on ragophilic behaviour in *Balanus balanoides* (L.). Vidensk. Medd. dansk. naturh. Foren. Kbh. **117** 1955 : 341-348.

**Bassett, A. M.** see Palmer, A. R. & Bassett, A. M.

**Battaglia, B.** Fauna bentonica lagunare e sue possibilità d'impiego per ricerche genetico-evolutive. Rapp. Comm. int. Mer Médit. **12** 1954 : 177-184.

**Becker, G. and Kampf, W.-D.** Die Holzbohrerseln der Gattung *Limnoria* (Isopoda) und ihre Lebensweise, Entwicklung und Umweltaabhängigkeit. Z. angew. Zool. **1955** : 477-517 15 figs.

**Beier, M.** Zoologische Studien in West-Griechenland. I. Teil. S.B. öst. Akad. Wiss. Abt. I **163** 1954 : 1-10 3 pls. map. [not seen].

**[Beklemishev, K. V.]** Influence of diatom consumption by Copepods on their fluctuations in number, demonstrated by examples from the Far-Eastern seas]. Trud. Inst. Okeanol. **13** 1955 : 77-82 fig. [In Russian].

**Bennett, M. F.** see Brown, F.A. & others.

**Benson, R. H.** Ostracodes from the type section of the Fern Glen formation. J. Paleont. **29** 6 1955 : 1030-1039 pls. 107-108 1 text-fig.

**Berner, L.** Éthologie de *Gammarus pulex* L. (Amphipoda). Arch. Hydrobiol. **51** 1955 : 172-188.

**Bernhauser, A.** Zur Kenntnis der Retzer Sande. S.B. öst. Akad. Wiss. Abt. I **164** 1955 : 163-192 1 pl. 12 figs.

**Biancamaria, E.** Recherches biologiques et physiologiques sur *Potamon edulis* (Latr.) (Crustacé Décapode Brachyoure). Bull. Soc. Hist. nat. Afr. N. **46** 5-6 1955 : 155-168.

**Bielecka, W.** Rozprzestrzenienie Stratygraficzne matzorcaków. Przegląd Geol. **2** 1955 : 73-77 text-figs. 1-3.

**Birkholz, J.** Die Goldpunktgarnele (*Drino elegans* Risso). Aquar. Terrar. Z. **8** 1955 : 123-125 3 figs.

**Birstein, Y. A. and Borutsky, E. V.** [Life in subterranean waters].

Zhizn. presn. Vod. S.S.R. **3** [1951] : 683-705 11 figs.

**[Birshtein, Y. A. and Vinogradov, M. E.]** Pelagic gammarids of Kurile-Kamchatka depression]. Trud. Inst. Okeanol. **12** 1955 : 210-287 35 figs. [In Russian].

**Bocquet, C. and Bozic, B.** *Idyanthopsis psammophila* gen. et sp. n., *Tisbidæ* des sables de Roscoff. Arch. Zool. exp. gén. **93** 1955 (Notes et Rev.) : 1-9.

**Bocquet, C. and Levi, C.** *Microjaera anisopoda* nov. gen., n. sp., Isopode psammique de la sous-famille nouvelle des *Microjanirinae*. Arch. Zool. exp. gén. **92** Notes et Rev. 1955 : 116-134 6 figs.

**Boden, B. P.** *Euphausiacea* of the Benguela current. First survey, R.R.S. 'William Scoresby', March 1950. 'Discovery' Rep. **27** 1955 : 337-376 24 figs.

**Boden, B. P., Johnson, M. W. and Brinton, E.** The Euphausiacea (Crustacea) of the North Pacific. Bull. Scripps Instn. Oceanogr. **6** 1955 : 287-460 55 figs.

**Boenzi, S.** Brevi osservazione sopra alcuni Balanidi del Pliocene dell' Attica. Ann. géol. hellén. **11** 1947 : 204-208 pls. 23-24. [Greek summary].

**[Borovitzkaya, M. P.]** Comparison of the parasitic fauna of the economic fishes of the river Danube and its estuaries]. Trud. Leningr. Soc. Nat. **71** 4 1952 : 10-25. [In Russian].

**Borutsky, E. V.** see Birstein, Y. A. & Borutsky, E. V.

**Boschma, H. (1).** Rhizocephala from Indo-China, VII. Parasites of the crab *Thalamita crenata* Latreille. VIII. Concluding remarks. Proc. Akad. Wet. Amst. **58C** 2 1955 : 137-153 9 figs.

**Boschma, H. (2).** A rhizocephalan parasite of the crab *Cymopolia whitei* Miers. Proc. Akad. Wet. Amst. **58C** 3 1955 : 273-278 4 figs.

**Boschma, H. (3).** The rhizocephalan parasite of the crab *Xantho incisus* (Leach). Zool. Meded. **33** 1955 : 227-235 5 figs.

**Boschma, H. (4).** Rhizocephalan parasites of the crab *Pugettia brevirostris*,

with notes on *Sacculina gracilis*. Zool. Meded. **33** 1955 : 237-249 8 figs.

**Boschma, H. (5).** Rhizocephala from New Guinea. I. *Sacculina carinata* Kossmann and *Loxothylacus kossmanni* nov. spec. Zool. Meded. **34** 1955 : 25-50 17 figs.

**Boschma, H. (6).** Rhizocephala from New Guinea. III. *Loxothylacus variabilis* Boschma. Zool. Meded. **34** 1955 : 89-107 11 figs.

**Boschma, H. (7).** The described species of the family Sacculinidae. Zool. Verh. **27** 1955 : 1-76.

**Botnariuc, N.** Cu privire la repartitia orizontala a zooplanctonului, notă preliminară. Bull. Sti. Biol. Agron. Geol. Geog. **4** 1954 : 739-752. [Roumanian with Russian and French résumés].

**Bott, R. (1).** Die Süßwasserkrabben von Afrika und ihre Stammesgeschichte. Ann. Mus. Congo belg. Zool. Ser. 3, III, **1** 1955 : 209-352 30 pls. 103 figs.

**Bott, R. (2).** Dekapoden (Crustacea) aus El Salvador. 2. Litorale Dekapoden, ausser *Uca*. Senckenbergiana, Biol. **36** 1955 : 47-72 6 pls. 7 figs.

**Bourdillon, A.** Influence du degre de dureti du bois sur la fixation de *Limnoria lignorum* (Rathke). Rec. Sta. mar. Endoume No. 15 1955 : 5-13 1 fig.

**Bousfield, E. L. (1).** The distribution and spawning seasons of barnacles on the Atlantic Coast of Canada. Bull. nat. Mus. Can. No. 132 1954 : 112-154 6 figs.

**Bousfield, E. L. (2).** The cirripede crustacea of the Hudson Strait region, Canadian Eastern Arctic. J. Fish. Res. Bd. Can. **12** 1955 : 762-767.

**Bowman, T. E.** A new genus and species of whale-louse (Amphipoda : Cyamidae) from the false killer whale. Bull. mar. Sci. Gulf & Caribbean **5** 1955 : 315-320 1 fig.

**Bowman, T. E. (2).** The isopod genus *Chiridotea* Harger, with a description of a new species from brackish waters. J. Wash. Acad. Sci. **45** 1955 : 224-229 2 figs.

**Bowman, T. E. (3).** A new copepod of the genus *Calanus* from the Northeastern Pacific with notes on *Calanus tenuicornis* Dana. Pacif. Sci. **9** 1955 : 413-422 4 figs.

**Bowman, T. E.** see Menzies, R. J., Bowman, T. E. & Alverson, F. G.

**Božić, B. (1).** Copépodes Harpacticoides des sables des environs de Roscoff. Description de quelques formes nouvelles. Arch. Zool. exp. gén. **92** Notes et Rev. 1955 : 1-12 4 figs.

**Božić, B. (2).** Nouveaux essais d'hybridation entre plusieurs formes appartenent au genre *Tigriopus* Norman (Copépodes harpacticoides). C.R. Acad. Sci. Paris **241** 1955 : 1085-1087.

**Bozic, B.** see Bocquet, C. & Bozic, B.

**Braekhan, O. R.** see Lambertsen, G. & Braekhan, O. R.

**Brandes, C.-H.** Über eine neue Art der parasitischen copepoden : *Pseudocycnus thynnus* n. sp. Veröff. Inst. Meeresf. Bremerhaven **3** 2 1955 : 190-198 2 figs.

**Brehm, V. (1).** Report No. 2 from Professor T. Gisten's Expedition to Australia in 1951-1952. Bericht über cladoceren und copepoden. Acta Univ. lund. N.F. **49** 7 1954 : 1-11 2 figs.

**Brehm, V. (2).** Ein neuer Tropodiaptomus aus Zentralafrika. Anz. öst. Akad. Wiss. **92** 1955 : 245-252 5 figs.

**Brehm, V. (3).** Sur quelques crustacés inférieurs du Maroc. Bull. Soc. Sci. nat. Maroc **34** 1954 : 211-215 4 figs.

**Brehm, V. (4).** Mexicanische Entomostraken. Öst. zool. Zeitsch. **4** 1954 : 412-419 10 figs.

**Brehm, V. (5).** *Pseudodiaptomus batillipes* spec. nov., ein zweiter *Pseudodiaptomus* aus Madagascar. S.B. öst. Akad. Wiss. Abt. I **163** 1955 : 603-607 4 figs.

**Brehm, V. (6).** Ein neuer Streptocephalus aus Indonesien (*Streptocephalus javanensis* n. sp.). S.B. öst. Akad. Wiss. Abt. I **164** 1955 : 249-254 4 figs.

**Brehm, V. (7).** Niphargus. Probleme. S.B. öst. Akad. Wiss. Abt. I **164** 1955 : 487-523 42 figs.



**Brehm, V. (8).** Cladocera aus Venezuela. *Ergeb. deutsch. limnol. Venezuela Exp.* 1952 **1** [1954 ?] : 217–232 5 figs.

**Brehm, V. (9).** Süßwasserfauna und Tiergeographie. *Öst. zool. Z.* **6** 1955 : 250–269.

**Bresson, J.** Aselles de sources et de grottes d'Eurasie et d'Amérique du Nord. *Arch. Zool. exp. gén.* **92** 1955 Notes et Rev. : 45–77 61 figs.

**Brian, A.** Un maschio sessualmente maturo di *Philoscia* raccolto nella Laguna Veneta. *Doriana* **2** No. 51 1955 : 1–3.

**Brian, A. (2).** Nota sul *Gammarus locusta* (L.) della Laguan Veneta. *Doriana* **2** No. 59 1955 : 1–12 26 figs.

**Brinton, E.** *see* Boden, B. P., Johnson, M. W. & Brinton, E.

**Brodsky, K. A. (1).** [On the distribution of the plankton of the north-western part of the Pacific Ocean]. *C.R. Acad. Sci. URSS.* **101** 1955 : 961–964 maps. [In Russian].

**Brodsky, K. A. (2).** [Zoogeographical distribution of the pelagic calanoids of the Far Eastern seas and the northern part of the Pacific Ocean]. *C.R. Acad. Sci. URSS.* **102** 1955 : 649–652 maps. [In Russian].

**Brodsky, K. A. (3).** [Plankton of the North-Western parts of Kuro-Sio and pre-Kurile waters of the Pacific]. *Trud. Inst. Okeanol.* **18** 1955 : 124–133 2 figs. [In Russian].

**Brodsky, K. A. (4).** [The calanoid fauna of the Kurile-Kamchatka depression]. *Trud. Inst. Oceanogr. Akad. Nauk SSSR.* **12** 1955 : 184–209 14 figs. [In Russian].

**Brodsky, K. A. (6).** [*Pareuchaeta pavlovskii*, new species of Calanoide from the northern part of Pacific]. *Trav. Inst. zool. Acad. Sci. URSS.* **21** 1955 : 187–189 figs. [In Russian].

**Brodsky, K. A. and others.** [Crustacea]. [Atlas invertebrates far-eastern seas USSR.] Moscow 1955 : 112–157. [In Russian].

**Broekhuysen, G. J.** The breeding and growth of *Hymenosoma orbiculare* Desm. (Crustacea Brachyura). *Ann. S. Afr. Mus.* **41** 1955 : 313–343 13 figs.

**Brown, F. A. Jr., Webb, H. M. and Bennett, M. F.** Proof for an endogenous component in persistent solar and lunar rhythmicity in organisms. *Proc. Nat. Acad. Sci.* **41** 1955 : 93–100.

**Brown, F. A., Jr., Webb, H. M. and Bennett, M. F. & Sandeen, M. I.** Evidence for an exogenous contribution to persistent diurnal and lunar rhythmicity under so called constant conditions. *Biol. Bull. Woods Hole* **109** 1955 : 238–254 7 figs.

**Brown, M. M. and Castell, C. P.** Additions to the London Clay Fauna of Oxshott, Surrey. *Lond. Nat. No.* **34** 1955 : 46–48.

**Brtek, J. (1).** Ein Beitrag zur Verbreitung der Untergattung *Proasellus* Dudich in der Slowakei. *Biologická, Bratislava* **9** 3 1954 : 296–301 figs. map. [German summary].

**Brtek, J. (2).** Beitrag zur Kenntnis der Verbreitung des *Mixodiaptomus kupelwieseri* (Brehm) in der Slowakei. *Biologická, Bratislava* **9** 1 1954 : 61–64. [German summary].

**Bryson, A.** *see* Ragotskii, R. A. & Bryson, A.

**[Bulicheva, A. I. (1).** New species of Amphipoda gammarids from the Sea of Japan, p. ii]. *Trav. Inst. Zool. Acad. Sci. URSS.* **21** 1955 : 193–207 6 figs. [In Russian].

**[Bulicheva, A. I. (2).** Hyperiidæ (Amphipoda) of the north-western part of the Pacific]. *C.R. Acad. Sci. URSS.* **102** 5 1955 : 1047–1050. [In Russian].

**Burollet, P. F.** Remarques sur l'espèce *Daphnia atkinsoni* Baird. Cladocère fréquent dans le Nord-Est de la Tunisie. *Bull. Soc. Sci. nat. Tunis* **7** 1954 : 129–134 2 pls.

**Bursell, E.** The transpiration of terrestrial isopods. *J. exp. Biol.* **32** 1955 : 238–255 4 figs.

**Butler, T. H.** Re-discovery of the parasitic cirripede *Mycetomorpha vancouverensis* Potts, in British Columbia waters. *J. Parasit.* **41** 1955 : 321.

**[Butzkaya, N. A.** Parasitic fauna of the Black Sea economic fish in the pre-estuarine area of Danube]. *Trud. Leningr. Soc. Nat.* **71** 4 1952 : 30–52 4 figs. [In Russian].



**Buturović, A.** Contribution à la connaissance d'isopodes terrestres des grottes de Macédoine. *Fragm. balcanica* **1** 14 1955 : 117-124 10 figs.

**Buturović, A. (2).** Über einige *Hyloniscus*. Arten Bosniens und der Herzegowina (*Isopoda terrestria*). *Zool. Anz.* **154** 1955 : 168-176 13 figs.

[**Buyanovskaya, A. A.** Kuyalnitzk liman]. *Priroda* **10** 1955 : 114 fig. [In Russian].

**Cădăriu, M. I.** *see* Radu, V. G., and V. V. & Cădăriu, M. I.

**Cannicci, G.** Notizie su Cladoceri marini raccolti in località costiere dell'Adriatico e del Tirreno. Nota I. *Boll. Pesca Piscic. Idrobiol.* **30** 1955 : 200-211 1 pl.

**Cannicci, G. (2).** Notizie sulla faies planctonica di laghi appenninici naturali e artificiali. *Verh. int. Ver. Limnol.* **12** 1955 : 455-463 1 pl.

**Capart, A.** Quelques remarques sur les Crustacés d'une frénère a carex de la forêt de Soignes. *Mém. Inst. Sci. nat. Belge* No. 122 1952 : 181-185 2 figs.

**Că răușu, A.** Contribuții la studiul isopodelor (*Crustacea Malacostraca*) Mării Negre (litoralul româneș și regiunile învecinate). III. Familia *Idoteidae*. *An. Știin. Univ. "Al. I. Cuza"* **11** (Științe Nat.) T1, fasc. 1-2 1955 : 137-216.

**Că răușu, A. (2).** Contribuține la studiul spheromienilor din Marea Neagră. I.—*Sphaeroma pulchellum* (Colosi). II.—Studiu comparativ între *Sphaeroma pulchellum* (Colosi) și *Sphaeroma serratum* (Fabricius). *Bul. sti. Acad. Repub. rom. Ser. Geol.*, **2** 6 1950 : 297-322 26 figs. [French résumé].

**Că răușu, S., Dobreanu, E. & Manolache, C.** Amphipoda. *Faune Rep. Pop. Romane* **4** fasc. 4 1955 : 1-407 368 figs.

**Carlisle, D. B. (1).** Local variations in the colour pattern of the prawn *Leander serratus* (Pennant). *J. Mar. biol. Ass. U.K.* **34** 1955 : 559-563 2 figs.

**Carlisle, D. B. (2).** On the hormonal control of water balance in *Carcinus*. *Pubbl. Staz. zool. Napoli* **27** 1955 : 227-231.

**Carlisle, D. B.** *see* Knowles, F. G. W., Carlisle, D. B. & Dupont-Raabe, M.

**Carlisle, D., Dupont-Raabe, M. and Knowles, F.** Recherches préliminaires relations à la séparation des crustacés et des insectes. *C.R. Acad. Sci. Paris* **240** 1955 : 665-667.

**Carlsson, J. G.** The Cretaceous Cirripedes of Sweden. *Acta Univ. lund. N.F.* **49** 1 1954 : 1-39 6 pls.

**Carrara, I. S.** Nota sobre un Crustaceo parasito dei Abadejo y Merluza. *Fac. Cien. Vet. Univ. Nac. Eva Peron* 60y 118 1954 : 1-4 1 pl.

**Carvalho, J. de P.** Nota sobre *Lernaenicus longiventris* Wilson e sua ocorrência em *Xenomelanius brasiliensis* (Quoy & Gaimard) (Crustacea, Copepoda-Pisces, Atherinidae). *Bol. Inst. oceanogr. S. Paulo* **4** 1-2 1953 : 181-190 2 figs. [Not seen].

**Castañõ, J. T.** Las inserciones musculares en las crustáceos. *Bol. Soc. esp. Hist. nat.* **51** Biol. 1954 : 111-122 2 pls.

**Castell, C. P.** *see* Brown, M. M. & Castell, C. P.

**Castro, A. L. de.** Contribueção ao conhecimento dos crustaceos da order stomatopoda do litoral Brasileiro. *Bol. Mus. nac. Rio de J. (Zool.)* no. 128 1955 : 1-68 56 figs.

**Castro, A. L. de (2).** *Ischioscia amazonica*, uma nova espécie de isópode terrestre do Estado do Amazonas (Isopoda, Oniscidae). *Rev. bras. Biol.* **15** 1955 : 51-55 8 figs.

**Castro, A. L. de (3).** *Paracymothoa astyanaxi* gen. e sp. n. de isópode parasita de peisces de água doce (Isopoda, Cymothoidae). *Rev. bras. Biol.* **15** 1955 : 411-414 18 figs.

**Castro, A. L. de** *see also* Lemos de Castro, A.

**Causey, D.** The external morphology of *Blias prionoti* Kroyer, a copepod parasite of the sea robins (Prionotus). *Publ. Inst. Mar. Sci. Univ. Tex.* **4** No. 1 1955 : 5-12 7 figs.

**Chabonis, L. & F.** Petite Histoire Naturelle des établissements l'Océanie. Saint-Amaud-Montrond **2** 1954 : 1-137 figs.

**Chace, F. A. Jr.** Notes on shrimps from the Marshall Islands. *Proc. U.S. nat. Mus.* **105** No. 3349 1955 : 1-22 8 figs.

**Chapman, G.** Aspects of the Fauna and Flora of the Azores. VI. The Density of Animal Life in the Coralline Alga Zone. *Ann. Mag. nat. Hist.* (12) **8** 1955 : 801-805.

**Chapman, G. and Santler, J. E.** Aspects of the Fauna and Flora of the Azores. V. Crustacea. *Ann. Mag. nat. Hist.* (12) **8** 1955 : 371-376.

**Chappuis, P. A. (1).** Mission Henri Coiffait au Liban en 1951.—Crustacés d'eau douce cavernicoles. *Arch. Zool. exp. gén.* **91** 1955 : 533-536.

**Chappuis, P. A. (2).** Copépodes harpacticoides des Indes et de l'Iran. *Bull. Soc. Hist. nat. Toulouse* **89** 1954 : 213-224 16 figs.

**Chappuis, P. A. (3).** Recherches sur la faune interstitielle des sédiments marins et d'eau douce à Madagascar. IV.—Copépodes harpacticoides psammiques de Madagascar. V.—Découverte de l'ordre. *Mém. Inst. Sci. Madagascar* **9A** 1955 : 45-89 116 figs.

**Chappuis, P. A. (4).** Nouveaux Harpacticoides de la nappe phréatique de l'Adige. *Mem. Mus. civ. Stor. nat. Verona* **4** 1955 : 157-162 14 figs.

**Chappuis, P. A. (5).** Notes sur les Copépodes. 18 Nouveaux Harpacticoides des Pyrénées. *Notes biospéolog.* **10** 1955 : 89-92 figs.

**Chappuis, P. A. (6).** Notes sur les Copépodes. 19. Harpacticoides de Grèce. *Notes biospéolog.* **10** 1955 : 92-97 figs.

**Chappuis, P. A. (7).** Notes sur les Copépodes. 20. Copépodes Harpacticoides des Isles du Pacifique. *Notes biospéolog.* **10** 1955 : 97-101 figs.

**Chappuis, P. A. (8).** Remarques générales sur le genre *Asellus* et description de quatre espèces nouvelles. *Notes biospéolog.* **10** 1955 : 164-182 35 figs.

**Chappuis, P. A. (9).** Harpacticoides troglobies du Japon. *Notes biospéolog.* **10** 1955 : 183-190 29 figs.

**Chappuis, P. A. (10).** Harpacticoides

Psammiques du Lac Tanganyika. *Rev. Zool. Bot. afr.* **51** 1955 : 68-80 33 figs.

**Chappuis, P. A. (11).** Harpacticoides Psammiques récoltés par Cl. Delamare Deboutteville en Méditerranée. *Vie et Milieu* **4** 1954 : 254-276 71 figs.

**Chappuis, P. A.** *see* Delamare-Deboutteville, C. & Chappuis, P. A.

**Chappuis, P. A. and Kunz, H.** Un nouveau *Diagoniceps* (Cop. Harp.) de la côte près de Dakar. *Bull. Inst. franç. Afr. noire* **17** 1955 : 1020-1023 16 figs.

**Charniaux-Cotton, H.** Phénomènes d'intersexualité chez un crustacé amphipode, *Orchestia gammarella* Pallas. *C.R. Ass. franç. Av. Sci.* **72** 1953 : 447-449.

**Charniaux-Cotton, H. (2).** Le déterminisme hormonal des caractères sexuels d'*Orchestia gammarella* (Crustacé amphipode). *C.R. Acad. Sci. Paris* **240** 1955 : 1487-1489.

**Chaudonneret, J.** Le système nerveux de la région gnathale de l'écrevisse américaine *Cambarus affinis* Say et la question des paragnathes. *Trav. Lab. Zool. Dijon* No. 12 1955 : 1-6.

**Chow, J.** *see* Prosser, C. L., Green, J. W. & Chow, J.

**Christiansen, E. N.** Notes on *Calocarides coronatus* (Trybom). *Astarte* **12** 1955 : 1-5.

**Clark, D. P.** The influence of body weight, temperature and season upon the rate of oxygen consumption of the terrestrial amphipod, *Talitrus sylvaticus* (Haswell). *Biol. Bull. Woods Hole* **108** 1955 : 253-257.

**Clark, R. B. and Milne, A.** The sublittoral fauna of two sandy bays on the Isle of Cumbræ, Firth of Clyde. *J. Mar. biol. Ass. U.K.* **34** 1955 : 161-180 2 figs.

**Clarke, A. S.** Studies on the life cycle of the Pseudophyllidean Cestode *Schistocephalus solidus*. *Proc. zool. Soc. Lond.* **124** 1954 : 257-302 2 pls. 29 text-figs.

**Clarke, W. D.** A new species of the genus *Heteromysis* (Crustacea, Mysidacea) from the Bahama Islands,



commensal with a sea anemone. Amer. Mus. Novit. No. 1716 1955 : 1-13 8 figs.

**Cloudsley-Thompson, J. L.** The biology of woodlice. *Discovery* **16** 1955 : 248-251 figs.

**Cloudsley-Thompson, J. L. (2).** The history of Bathynella. Country-side N.S. **17** 7 1955 : 275 1 fig.

**Colman, J. S. and Segrove, F.** The fauna living in Stoupe Beck Sands, Robin Hood's Bay (Yorkshire North Riding). *J. anim. Ecol.* **24** 1955 : 426-444 3 figs.

**Colman, J. S. and Segrove, F. (1).** The tidal plankton over Stoupe Beck Sands, Robin Hood's Bay (Yorkshire, North Riding). *J. anim. Ecol.* **24** 1955 : 445-462 1 fig.

**Comita, G. W. and Edmondson, W. T.** Some aspects of the limnology of an arctic lake. Stanford Univ. Publ. Univ. Ser. biol. Sci. **9** 1953 : 7-13.

**Connell, J. H.** *Elminius modestus* Darwin, a Northward Extension of Range. *Nature, Lond.* **175** 1955 : 954.

**Copeland, M. J.** see Kesling, R. V. & Copeland, M. J.

**Cornwall, I. E.** The barnacles of British Columbia. B.C.Prov. Mus. Educ. Handbk. No. 7 1955 : 1-69 figs.

**Cornwall, I. E. (2).** Arthropoda, pedia. *Canad. Pacif. Fauna* 10e 1955 : 1-49 40 figs.

**Crisp, D. J.** The behaviour of barnacle cyprids in relation to water movement over a surface. *J. exp. Biol.* **32** 1955 : 569-590 7 figs.

**Crisp, D. J. and Davies, P. A.** Observations *in vivo* on the breeding of *Elminius modestus* grown on glass sides. *J. mar. Biol. Ass. U.K.* **34** 1955 : 357-380 7 figs.

**Cushing, D. H.** Some experiments on the vertical migration of zooplankton. *J. Anim. Ecol.* **24** 1955 : 137-166 14 figs.

**Dahl, E.** The distribution of deep-sea Crustacea. 14th Int. Zool. Congr. Copenhagen 1953. IUBS Deep Sea Colloquium. [5 pp.].

**Dahl, E. (2).** To the question of larval segments and brain structure and their bearing upon crustacean phylogeny. *K. fysiogr. Sällsk. Lund Förh.* **24** 1955 : 59-67.

**Dahl, E. (3).** Some aspects of the ontogeny of *Mesamphisopus capensis* (Barnard) and the affinities of the Isopoda Phreatoicoidea. *K. fysiogr. Sällsk. Lund Förh.* **24** 1955 : 83-88 7 figs.

**Dahl, E. (4).** The distribution of deep sea Crustacea. *Publ. Un. int. Sci. biol. (B)* No. 16 1954 : 43-48.

**Dalton, R. F.** Report on Dorset natural history for 1953, Arthropods other than Lepidoptera. *Proc. Dorset nat. Hist. Fld. Cl.* **75** 1955 : 136-139.

**Damas, H.** Étude limnologique de quelques lacs ruandais. III. Le plancton. *Mém. in 8° Acad. Sci. colon. Cl. Sci. nat. méd. N.S.* **1** 3 1955 : 1-67 7 figs.

**Danisch, E.** Über die Flora und Fauna der Kimmeridge- und Gigas-Schichten zwischen Engter und Venue. *Veröff. naturw. Ver. Osnabrück* **27** 1955 : 54-73 1 pl. 2 figs. map.

**Daum, J.** see Husson, R. and Daum, J.

**Davadie, C. and Emberger, J.** Découverte d'une nouvelle espèce de *Stramentum* (Loricula) dans l'Albien supérieur de Bou-Saada. *Bull. Publ. Serv. Carte géol. algér. (N.S.)* No. 5 1954 : 401-418 3 figs. 2 pls.

**Davies, P. A.** see Crisp, D. J. & Davies, P. A.

**Davis, C. C.** A preliminary study of the plankton of the Cleveland Harbor area, Ohio. III. The zooplankton, and general ecological considerations of phytoplankton and zooplankton production. *Ohio J. Sci.* **54** 1954 : 388-408 5 figs.

**Dawson, C. E.** A bibliography of the lobster and the spiny lobster. Families Homaridae and Palinuridae. Florida State Board of Conservation 1954 pp. VI + 86.

**Dawydoff, C.** Contribution à l'étude des invertébrés de la fauna marine benthique de l'Indochine. *Bull. biol. Suppl.* No. 39 1952 : 1-158 2 maps.

**Deckart, M.** Die Fangblasen von *Utricularia*. *Mikrokosmos* **44** 5 1955 : 97-101 9 figs.

**Daevey, E. S., Jr.** Paleolimnology of the upper swamp deposit, Pyramid Valley. *Rec. Canterbury [N.Z.] Mus.* **6** 1955 : 291-344 figs.

**Dehn, M. v.** Die Geschlechtsbestimmung der Daphniden. Die Bedeutung der Fettstoffe, untersucht an *Moina rectirostris* L. *Zool. Jb. (Allg. Zool.)* **65** 1955 : 334-356 2 figs.

**Delamare-Deboutteville, C. L'** écologie et la répartition du mystacocaride *Derocheilocaris remanei* Delamare & Chappuis. *Rassenga Speleol. ital.* **6** 1954 : 119-122 figs.

**Delamare-Deboutteville, C. (1).** Premières recherches sur la faune souterraine littorale en Espagne. *Publ. Inst. Biol. apl.* **17** 1954 : 119-129.

**Delamare-Deboutteville, C. (2).** Recherches sur l'écologie et la répartition du Mystacocaride *Derocheilocaris remanei* Delamare & Chappuis, en Méditerranée. *Vie et Milieu* **4** 1954 : 321-380 23 figs.

**Delamare-Deboutteville, C. (3).** Eaux souterraines littorales de la côte catalane française. (Mise au point faunistique). *Vie et Milieu* **5** 1955 : 408-451.

**Delamare-Deboutteville, C. (4).** L'écologie du Mystacocaride *Derocheilocaris remanei* f. *biscayensis* sur les côtes du Golfe de Gascogne. *Vie et Milieu* **5** 1955 : 310-328 9 figs.

**Delamare-Deboutteville, C. (5).** Sur le mélange des eaux d'infiltrations marines et des eaux phréatiques continentales sous une plage d'une mer sans marées. *C.R. Acad. Sci. Paris* **240** 1955 : 460-462 fig.

**Delamare-Deboutteville, C. (6).** Sur la circulation des eaux marines et des eaux phréatiques continentales dans les plages des mers à marées. *C.R. Acad. Sci. Paris* **240** 1955 : 555-557 1 fig.

**Delamare-Deboutteville, C. and Chappuis, P. A.** Un Syncaride nouveau sur les bords du Tanganyika. *Notes Biospéologiques* **10** 1955 : 81-87 4 figs.

**Delamare - Deboutteville, C., Gerlach, S. and Siewing, R.** Re-

cherches sur la faune des eaux souterraines littorales du Golfe de Gascogne. *Littoral des landes. Vie et Milieu* **5** 1955 : 373-407.

**Delamare-Deboutteville, C. and Nunes-Ruivo, L. P.** Parasites de Poissons de mer ouest-africaines récoltés par M. J. Cadenat. II. Copépodes (Ire Note) Genres *Lernanthropus*, *Sagum*, *Paeon*, *Pennella*. *Bull. Inst. Fr. Afr. Noire* **16A** 1954 : 139-166 16 text-figs.

**Delamare-Deboutteville, C. and Nunes-Ruivo, L. (1).** Remarques sur le développement de la femelle d'*Haemobaphoides ambiguus* (T. Scott) et analyse critique des genres *Haemobaphes* Steenstrup & Lütken, *Haemobaphoides*, T. & A. Scott et *Collipruvus* Wilson. (Crust. Copepoda). *Bull. Soc. Zool. Fr.* **80** 1955 : 27-37 4 figs.

**Delamare-Deboutteville, C. and Nunes-Ruivo, L. (2).** *Echiurophilus fizei* n.g. n.sp. copépode parasite d'un Échiuride d'Indochine. *Vie et Milieu* **6** 1955 : 101-112 5 figs.

**Delamare-Deboutteville, C. and Nunes-Ruivo, L. (3).** Sur l'utilisation des caractères biologiques et éthologiques dans la systématique des chondracanthidiens (Crustacés Copépodes) à propos de la nouvelle famille des Echiurophilidae. *C.R. Acad. Sci. Paris* **240** 1955 : 1579-1581.

**Dell, R. K.** A record of *Latreillopsis petterdi* Grant (Crustacea, Brachyura) from New Zealand, with notes on some other species of Crustacea. *Rec. Dom. Mus. N.Z.* **2** : 111 1955 : 147-149 1 fig.

**Délye, G.** Action d'un bopyrien sur les caractères sexuels de *Munida iris* ssp. *Ruttlanti* Zariquiey (Décapode Anomoure). *Bull. Soc. Hist. nat. Afr. N.* **46** 1955 : 84-88 figs.

**Demeusy, N.** Essais d'implantation d'organes réactifs chez les crustacés. *Bull. Soc. Sci. Nancy N.S.* **14** 2 1955 : 54-56.

**Demeusy, N. (1).** Implantations de gonades chez le crabe *Carcinus maenas* Pennant. *C.R. Acad. Sci. Paris* **240** 1955 : 1147-1150.

**Demeusy, N. see** Vernet-Cornubert, G., & Demeusy, N.



**Dennell, R.** Observations on the luminescence of bathypelagic Crustacea Decapoda of the Bermuda Area. *J. linn. Soc. (Zool.)* **42** 1955 : 393-406 6 figs.

**Dietz, R.** Zahl und Verhalten der Chromosomen einiger Ostracoden. *Z. Naturf.* **10B** 2 1955 : 92-95 1 fig.

**Dieuzeide, R.** Recherches sur les fonds chabutables de la région d'Alger. I.—Introduction. Dragages et chalutages. Notes faunistiques sur la zone meso-abyssale. *Bull. Sta. Aquic. Pêche Castiglione (N.S.)* **7** 1955 : 7-86 15 pls.

**Dieuzeide, R. and Goëau-Brissonnière, W.** *Paragalene longicrura* Nardo (Decapode Brachyoure) aux environs d'Alger. *Bull. Sta. Aquic. Pêche Castiglione (N.S.)* **7** 1955 : 273-279 3 figs.

**Dijkgraaf, S.** Die Augenstielbewegungen der Languste (*Palinurus vulgaris*). *Experientia* **11** 8 1955 : 329-330.

**Dijkgraaf, S. (I).** Lauterzeugung und Schallwahrnehmung bei der Languste (*Palinurus vulgaris*). *Experientia* **11** 8 1955 : 330-331 2 figs.

**Dittmar, H.** Ein Sauerlandbach. Untersuchungen an einem Wiesen-Mittelgebirgsbach. *Arch. Hydrobiol.* **50** 1955 : 305-552 4 pls. 24 figs.

**Dobreanu, E., Manolache, C. and Puscariu, V.** *Synurella intermedia* n.sp. *Bul. st. Acad. Repub. rom. Sect. Biol.*, **4** 3 1952 : 631-640 7 figs. [French résumé].

**Dobreanu, E., Manolache, C. and Puscariu, V. (I).** Nouvelles espèces d'Amphipodes phréatiques de la République Populaire Roumaine. *Bul. st. Acad. Repub. rom. Sect. Sti. Biol. Agron. Geol. Geogr.* **5** 3 1953 : 603-616 21 figs. [French résumé].

**Dobreanu, E. see Cărașu, S.**  
**Dobreanu, E. & Manolache, C.**

**Dolgopolskaya, M. A.** [Occurrence of *Lepas* larvae in the plankton of the Black Sea]. *Trav. Sta. biol. Sebastopol.* **8** 1954 : 174-177 figs. [In Russian].

**Dolgopolskaya, M. A. (I).** [Metamorphosis of Black Sea Decapods]. 2. Callianassidae. *Trav. Sta. biol. Sebastopol* **8** 1954 : 178-213 14 figs. [In Russian].

**Dolgopolskaya, M. A. (2).** [Importance of the Black Sea decapod crustacea as fish and dolphin food]. *Trav. Sta. biol. Sebastopol* **8** 1954 : 214-219. [In Russian].

**Dollfus, R. Ph.** Proposition pour le rejet définitif des noms de genres *Pagurus* Fabricius, 1775, et *Pagurus* Latreille 1803 ; proposition d'accepter définitivement *Eupagurus* Brandt, 1851 (sub. gen.) et *Dardanus* Paulson 1875. comme noms de genres. *Bull. zool. Nom.* **11** 1955 : 322-324.

**Donze, P. et Grékoïff, N.** Une coupe du Purbeckien dans la région du Poizat (Jura méridional). *C.R. Soc. géol. Fr.* **13** 1953 : 264-266.

**Dorn, E.** Zur Statocystenfunktion des Flusskrebses. *Zool. Jb. (Allg. Zool.)* **65** 1955 : 496-504.

**Drach, P.** Les Leucosiidés et la réalisation d'une fonction nouvelle chez les crustacés décapodes. *C.R. Acad. Sci. Paris* **241** 1955 : 1998-2001.

**Drooger, C. W., Kaaschieter, J. P. A. and Key, A. J.** The microfauna of the Aquitanian-Burdigalian of southwestern France. *Verh. Akad. Wet. Amst. Afd. Natuurk. (I)* **21** 2 1955 : 1-136.

**Duhig, M. and Humphries, C. L.** *Amphilochus brunneus* Della Valle, an amphipod new to Britain and Ireland and notes on other amphipods not previously recorded in Irish coastal waters. *Proc. roy. Irish Acad.* **57B** 8 1955 : 123-129.

**Dupont-Raabe, M. see Knowles, F. G. W., Carlisle, D. B. & Dupont-Raabe, M., Lerma, B. de Dupont-Raabe, M. & Knowles, F. and Carlisle, D., Dupont-Raabe, M. & Knowles, F.**

**Eberly, W. R.** Summary of the distribution of Indiana crayfishes, including New State and County records. *Proc. Ind. Acad. Sci.* **64** 1955 : 281-283.

**Échalier, G.** Rôle de l'organe Y dans le déterminisme de la mue de *Carcinides (Carcinus) maenas* L. (Crustacés décapodes) : Expériences d'implantation. *C.R. Acad. Sci. Paris* **240** 14 1955 : 1581-1583.

**Edmondson, C. H.** Resistance of woods to marine borers in Hawaiian

waters. Bull. Bishop Mus., Honolulu No. 217 1955 : 1-91 27 figs.

**Edmondson, W. T.** The seasonal life history of *Daphnia* in an Arctic lake. Ecology **36** 1955 : 439-455 8 figs.

**Edmondson, W. T.** *see* Comita, G. W. & Edmondson, W. T.

**Edney, E. B. and Spencer, J. O.** Cutaneous respiration in woodlice. J. exp. Biol. **32** 1955 : 256-269 2 figs.

**Edwards, G. A.** *see* Valente, D. & Edwards, G. A.

**Eglitis, V. K.** [Soil fauna of the Latvian S.S.R.]. Riga 1954.

**Elgmork, K.** A nesting-stage without encystment in the annual cycle of the freshwater copepod *Cyclops strenuus strenuus*. Ecology **36** 1955 : 739-743 2 figs.

**Ellis, B. E. and Messina, A. R.** Catalogue of Ostracoda. **5** 1954 : pp. 544. **6** 1955 : pp. 578. **7** 1955 : pp. 509 many text figs. Spec. Publ. Amer. Mus. Nat. Hist.

**Elster, H.-J.** Ein Beitrag zur Produktionsbiologie des Zooplanktons. Verh. int. Ver. Limnol. **12** 1955 : 404-411 3 figs.

**Emberger, J.** *see* Davadie, C. & Emburger, J.

**Enami, M.** Chromatophore activity in the central nervous organs of *Uca dubia*. Proc. Imp. Acad., Tokyo **19** 1943 : 693-697 4 figs.

**Erdman, H. E.** *see* Grosch, D. S. & Erdman, H. E.

**Estève, M.** Présence simultanée d'un thelycum et d'un petasma chez *Parapenaeus longirostris* (Lucas) (Crustacé, Penaeidae). Bull. Soc. Sci. nat. Tunis **7** 1954 : 89-92 1 pl. 3 figs.

**Facinella, E.** Osservazioni idrobiologiche sul lago di sbarramento di S. Ginstina. Trudi trentini **32** 2-3 1955 : 69-91 4 figs.

**Fairchild, E. J., II., and others.** Effects of lowered oxygen tension on the susceptibility of *Daphnia magna* to sodium chloride. J. Tenn. Acad. Sci. **29** 1954 : 178.

**Farran, G. P.** Irish species of the copepod *Diaptomus*. Irish Nat. **9** 1947 : 23. [Hitherto omitted from Z.R.].

**Fautrez-Firlefyn, N. and Fautrez, J.** Etude cytologique et cytochimique du spermatozoïde d'*Artemia salina* L. Seconde Partie : Le noyau, l'acro-some, le grain, les microgranules. Arch. Biol. Paris **66** 1955 : 195-222 1 pl.

**Ferguson, E., Jr.** A new ostracod of the genus *Cypricercus* from South Carolina. Trans. Amer. micr. Soc. **73** 1954 : 189-192 10 figs.

**Fidler, J. H.** *see* Wagstaffe, R. & Fidler, J. H.

**Fincher, J. A. and McGinty, M. S.** Copepoda and Cladocera in the plankton of East Lake in Birmingham. J. Ala. Acad. Sci. **22** 1952 : 100.

**Fingerman, M.** Factors influencing the rate of oxygen consumption of the dwarf crawfish, *Cambarellus schufeldtii*. Tulane Stud. Zool. **3** 1955 : 103-116 4 figs.

**Fingerman, M. (1).** Persistent daily and tidal rhythms of color change in *Callinectes sapidus*. Biol. Bull. Woods Hole **109** 1955 : 255-264 3 figs.

**Firlefyn** *see* Fautrez-Firlefyn, N.

**Fischer-Piette, E.** Répartition. Le long des cotes septentrionale de l'Espagne. Des principes espèces peuplement les roches intercoticaux. Ann. Inst. océanogr. Monaco N.S. **31** 2 1955 : 1-124 5 figs.

**Fisher, L. R., Kon, S. K., Plack, P. A. and Thompson, S. Y.** The nature, distribution and sources of vitamin A and carotenoids in Euphausiacea. Res. des Commun. 3me. Congr. Internat. Biochimie 1955. *See* Coll. Repr. Scotl. mar. biol. Ass. No. 202 1955. [Not seen].

**Fisher, L. R., Kon, S. K. and Thompson, S. Y.** Vitamin A and carotenoids in certain invertebrates. III. Euphausiacea. J. Mar. biol. Ass. U.K. **34** 1955 : 81-100 2 figs.

**Fize, A.** Sur une espèce nouvelle de *Danalia* parasite d'*Hapalocarcinus marsupialis* Stimpson. C.R. Acad. Sci. Paris **240** 1955 : 2444-2447 4 figs.

**Fize, A. and Serène, R.** Les Pagures du Vietnam. Notes Inst. Oceanogr. Nhatrang **45** 1955 : 1-228 6 pls. 35 figs.



**Florey, E.** Untersuchungen über die Impuls-Entstehung in den Streckrezeptoren des Flusskrebsees. *Z. Naturf.* **10B** 10 1955 : 591-597

**Fontaine, M.** The planktonic copepods (Calanoida, Cyclopoida, Monstrilloida) of Ungava Bay, with special reference to the biology of *Pseudocalanus minutus* and *Calanus finmarchicus*. *J. Fish. Res. Bd. Can.* **12** 1955 : 858-898 15 figs.

**Fontes, E. M.** see Williamson S. L. & Fontes, E. M.

**Forest, J.** Crustacés Décapodes, Pagurides. *Rés. Scient. Expéd. Océanogr. Belg. Eaux Côt. Afr.* **3** 4 1955 : 21-147 7 pls. 32 figs.

**Forest, J. (1).** Beautés du fond des mers, Paris (Larousse) 1955, pp. 100 frontis. text illust. col.

**Forest, J. and Holthuis, L. B.** Application for a decision regarding the status of the generic name *Pagurus* Fabricius, 1775 (Class Crustacea, Order Decapoda) and application for the use of the plenary powers in regard thereto in certain circumstances. *Bull. zool. Nom.* **11** 1955 : 307-321.

**Forest, J. and Zaraqüey Alvarez, R.** Sur les *Achaeus* de Méditerranée *A. cranchi* Leach et *Achaeus gordonae* sp. nov. *Publ. Inst. Biol. apl. Barcelona* **20** 1955 : 63-76 6 figs.

**Fourmanoir, P.** Notes sur la faune intercotidale des comores. I. Crustacés macroures et anomoures stomatopodes. *Nat. malgache* **7** 1955 : 19-33 5 figs.

**Fox, D. L.** Astaxanthin in the American flamingo. *Nature, Lond.* **175** 1955 : 942-943.

**Fox, H. M.** L'hémoglobine de la Daphnie et les problèmes qu'elle soulève. *Bull. Soc. zool. Fr.* **80** 1955 : 288-298.

**Fox, H. M. (1).** The effect of oxygen on the concentration of haem in invertebrates. *Proc. roy. Soc.* **143B** 911 1955 : 203-214.

**Fox, H. M. and Taylor, A. E. R.** The tolerance of oxygen by aquatic invertebrates. *Proc. roy. Soc.* 1955 **143B** : 214-225.

**Franz, H., Strouhal, H. and others.** Die Nordost-Alpen im Spiegel ihrer

Landtierwelt. **1** Innsbruck (Universitätsverlag Wagner) 1954.

**Fraser, J. H.** The plankton of the waters approaching the British Isles in 1953. *Mar. Res. Scotland* 1955 No. 1 : 1-12 maps.

**Frey, D. G.** Längsee : a history of meromixis. *Mem. Ist. Ital. Idrobiol. suppl.* **8** 1955 : 141-164.

**Fryer, G.** *Potamocypris thienemanni* Klie, a little known spring-inhabiting ostracod new to Britain. *Ann. Mag. nat. Hist.* (12) **8** 1955 : 121-124 8 figs.

**Fryer, G. (1).** A critical review of the genus *Ectocyclops* (Crustacea : Copepoda). *Ann. Mag. nat. Hist.* (12) **8** 1955 : 938-950 fig.

**Fryer, G. (2).** A faunistic and ecological survey of the freshwater Crustacea of the Huddersfield district. *Naturalist* No. 854 1955 : 101-126.

**Gabe, M.** La neuro-sécrétion chez les invertébrés. *Année biol.* (3) **30** 1-2 1954 : 5-62 17 figs.

**Galliford, A. L.** Notes on the freshwater organisms of Lundy Island with especial reference to the Crustacea and Rotifera. *Ann. Rep. Lundy Field Soc. No. 7* 1953 : 29-35 2 pls.

**Galliford, A. L. (1).** Notes on the aquatic fauna of the Freshfield-Ainsdale and Hightown sand-dunes. *Proc. Lpool. Nats. F. Cl. for 1952 [1953 ?]* : 25-27.

**Gamulin, T.** Contribution à la connaissance de l'écologie de la langouste (*Palinurus vulgaris* Latr.) dans l'Adriatique. *Acta adriat.* **7** 9 1955 : 1-20 map.

**Ganapati, P. N. and Nagabhusanam, R.** Crustacean wood borers of Visakhapatnam Harbour. *Curr. Sci.* **24** 6 1955 : 200-201.

**Gauthier, H.** Essai de la variabilité l'écologie le déterminisme du sexe et la reproduction de quelques *Moina* (Cladocères) récoltées en Afrique et à Madagascar. *Alger.* 1954 [1955] 247 pp. 31 pls.

**George, C. J., Nair, K. K., and Muthe, P. T.** The pericardial membrane and its role in crustacean circulation. *J. Anim. Morph. Physiol.* **2** 1955 : 73-78 3 figs.

- George, C. J., Reuben, N. and Muthe, P. T.** The central nervous system of *Panulirus polyphagus* (Herbst). *J. Anim. Morph. Physiol.* **1** No. 2 1955 : 8-19 3 figs.
- George, C. J., Reuben, N. and Muthe, P. T. (1).** The digestive system of *Panulirus polyphagus* (Herbst). *J. Anim. Morph. Physiol.* **2** 1955 : 14-27 9 figs.
- George, C. J., Reuben, N. and Muthe, P. T. (2).** The trunk muscles of *Panulirus polyphagus* (Herbst). *J. Anim. Morph. Physiol.* **2** 1955 : 65-72 4 figs.
- Gerlach, S.** *see* Delamare-Deboutteville, C., Gerlach, S. & Siewing, R.
- Gibson, L. B.** Upper Devonian Ostracoda from the Cerro Gordo formation of Iowa. *Bull. Amer. Paleont.* **35** 154 1955 : 1-38 pls. 1-2.
- Goëau-Brissonnière, W.** *see* Dieuzeide, R. & Goëau-Brissonnière, W.
- Gordon, H. R. S.** Displacement activities in fiddler crabs. *Nature, Lond.* **176** 1955 : 356-357.
- Gordon, I.** Systematic position of the Euphausiacea. *Nature, Lond.* **176** 1955 : 934.
- Gordon, I. (1).** Crustacea Decapoda. *Rep. Sw. Deep-Sea Exped.* **2** 2 1955 : 237-245 1 pl. 3 figs.
- Gottlieb, E.** *see* Holthuis, L. B. & Gottlieb, E.
- Gotto, R. V.** A note on the ecology of the genus *Lichomolgus* (Copepoda : Cyclopoida). *Ann. Mag. nat. Hist.* (12) **8** 1955 : 390-392.
- Gotto, R. V. (1).** The occurrence of *Lernaeopodina cluthae* (T. Scott) on a new host *Raia maculata* Montagu. *Irish. Nat. J.* **11** 1955 : 255-256.
- Graaf, F. de.** Eendelmossels. *Nederl. natuurh. Ver. Nederl. Jeugdb. Natuurst. No. 8* 1950 : 1-8 figs. [In Dutch].
- Gramm, M. N.** [On the transfection of the Neoprene deposits in North-Western part of Minbulak depression (Kizil-Kumi)]. *C.R. Acad. Sci. URSS.* **103** 4 1955 : 677-680. [In Russian].
- Grassi, M.** *see* Pardi, L. & Grassi, M.
- Grave, E. V.** Cyclops in production. *Nat. Hist. N.Y.* **63** 7 1954 : 320-321.
- Green, J.** Studies on a population of *Daphnia magna*. *J. Anim. Ecol.* **24** 1955 : 84-97 7 figs.
- Green, J. (1).** Haemoglobin in the fat-cells of *Daphnia*. *Quart. J. micr. Sci.* (3) **96** 1955 : 173-176 1 fig.
- Green, J. W.** *see* Prosser, C. L., Green, J. W. & Chow, J.
- Grekoff, N.** Sur l'évolution et la repartition de quelques genres d'Ostracodes dans la série géologique post-paléozoïque. *C.R. Soc. géol. Fr.* **14** 1954 : 333-336.
- Grekoff, N.** *see* Donze, P. & Grekoff, N.
- Grosch, D. S. and Erdman, H. E.** X-Ray effects on adult *Artemia*. *Biol. Bull. Woods Hole* **108** 1955 : 277-282 1 fig.
- Gross, W. J.** Aspects of osmotic regulation in crabs showing the terrestrial habit. *Amer. Nat.* **89** 1955 : 205-222 2 figs.
- Gruner, H.-E.** Die Gattung *Benthana* Bude-Lund 1908. *Zool. Jb. (Syst.)* **83** 1955 : 441-452 26 figs.
- Gruvel, A.** On a new species of the genus *Alepas* (*A. lankesteri*), from the collection of the British Museum. *Ann. Mag. nat. Hist.* (7) **6** 1900 : 195-197 1 pl. [Hitherto omitted from Z.R.].
- Gurney, R.** Validation, under the plenary powers, of the specific name *vulgaris* Schmeil, 1897, as published in the combination *Diaptomus vulgaris* (Class Crustacea, Order Copepoda). *Opin. int. Comm. Zool. Nom.* **3** 22 1954 : 289-295.
- Guryanova, E. F.** [New species of Amphipoda, Gammaridea from the northern part of Pacific]. *Trav. Inst. Zool. Acad. Sci. URSS.* **18** 1955 : 166-218 23 figs. [In Russian].
- Guryanova, E. F. (1).** [Contribution to the fauna of Isopoda of the Pacific. VI. New species of *Valvifera* from the Kurile-Sakhalin region]. *Trav. Inst. Zool. Acad. Sci. URSS.* **21** 1955 : 208-230 16 figs. [In Russian].
- Guryanova, E. F. (2).** [On the question of the principles of classification of continental water masses and the typology of certain lakes. *Trud.*



Jubil. Nauch. Sess. (Sect. biol. Sci.) [1945 ?] : 193-210. [In Russian].

**Haig, J.** The Crustacea Anomura of Chile. Lunds Univ. Årsskr. N.F. Avd. 2 Bd. 51 Nr. R 1955 : 68 pp. 13 figs.

**Hanaoka, K. I.** *see* Otsu, T. & Hanaoka, K. I.

**Harding, J. P.** Two new species of Ostracod from caves in the Belgian Congo. Rev. Zool. Bot. afr. **52** 1955 : 169-174 14 figs.

**Harding, J. P. (1).** The Percy Sladen Trust Expedition to Lake Titicaca in 1937, Crustacea : Copepoda. Trans. Linn. Soc. Lond. (3) **1** 1955 : 219-247 74 figs.

**Harding, J. P. (2).** The Percy Sladen Trust Expedition to Lake Titicaca in 1937. Crustacea : Cladocera. Trans. Linn. Soc. Lond. (3) **1** 1955 : 329-354 103 figs.

**Harding, J. P. (3).** The evolution of terrestrial habits in an ostracod. Bull. Sympos. org. Evol. New Delhi No. 7 1955 : 104-106 fig.

**Harding, J. P. (4).** The Armstrong College Zoological Expedition to Siwa Oasis (Libyan Desert) 1935. Crustacea : Branchiopoda and Ostracoda. Proc. Egypt. Acad. Sci. **10** 1955 : 58-68 36 figs.

**Harding, J. P. and Marshall, S. M.** Triploid nauplii of *Calanus finmarchicus*. Nature, Lond. **175** 1955 : 175 5 figs.

**Harding, J. P.** *see* Sylvester-Bradley, P. C. & Harding, J. P.

**Harris, J. E. and Wolfe, U. K.** A laboratory study of vertical migration. Proc. Roy. Soc. **B. 144** 1955 : 329-354 10 figs.

**Hartley, R. W., Jr.,** *see* Maxfield, M. & Hartley, R. W., Jr.

**Hartmann, G.** Neue marine Ostracoden der Familie Cypridae und der Subfamilie Cytherideinae der Familie Cytheridae aus Brasilien. Zool. Anz. **154** 1955 : 109-127 44 figs.

**Heberer, G.** Physiologischer Spermiendualismus bei harpacticoiden Copepoden. Naturwissenschaften **42** 9 1955 : 261-262 2 figs.

**Heegaard, P.** Parasitic copepods from tropical West Africa. Atlantide Report No. 3 1955 : 41-56 figs.

**Heldt, J.-H.** Note sur quelques petits crustacés ichthyophages. Bull. Soc. Sci. nat. Tunis **5** 1952 : 111-113 2 pls.

**Heldt, J. H. (1).** *Waptia fieldensis* Walcott et les stades larvaires des Pénéides. Bull. Soc. Sci. nat. Tunis **6** 1954 : 177-180 1 pl.

**Heldt, J. H. (2).** Contribution à l'étude de la biologie des crevettes pénéides. Formes larvaires de *Solenocera membranacea* (H. M.-Edw.). Bull. Sta. Océanogr. Salammbo No. 51 1955 : 29-56 figs.

**Heldt, J.-H. (3).** Note sur un mâle de *Pennella* (Copépode parasite). Bull. Soc. Hist. nat. Tunis **5** 1952 : 169-170 1 pl. [Not seen].

**Hemming, F.** Proposed use of the plenary powers to determine for the generic name *Varuna* Milne Edwards (H.), 1830 (Class Crustacea, Order Decapoda) a gender in harmony with accustomed usage. Bull. zool. Nom. **11** 1955 : 263-264.

**Hemming, F. (1).** Proposed suppression under the plenary powers of the generic name *Iphis* Meigen, 1800, for the purpose of validating the generic name *Iphis* Leach, 1817 (Class Crustacea, Order Decapoda) (Proposed correction of an error in *Opinion* 73). Bull. zool. Nom. **11** 1955 : 79-81.

**Hemming, F. (2).** Proposed validation, under the plenary powers, of the generic name *Homalaspis* Milne Edwards (A.), 1863 (Class Crustacea, Order Decapoda) (Proposed validation of an error in *Opinion* 85). Bull. zool. Nom. **11** 1955 : 83-85.

**Hemming, F. (3).** Proposed adoption of a *Declaration* clarifying Rule (G) in Article 30 in relation to the selection of the type species of a genus in a case where the nominal species so selected, though not itself cited at the time of the establishment of the genus in question, is objectively identical with another nominal species which was so cited. Bull. zool. Nom. **11** 1955 : 86-89.

**Hemming, F. (4).** Proposed revision of the entry on the *Official List of Generic Names in Zoology* regarding the generic name *Homarus* Weber, 1795 (Class Crustacea, Order Decapoda) (Proposed revision of an entry made by the ruling given in *Opinion* 104). Bull. zool. Nom. **11** 1955 : 114-116.

**Hensick, W.** Das Vorkommen der Cladoceren im Dümmer im Sommer 1952. Arch. Hydrobiol. **50** 1955 : 160-187 1 fig.

**Hepper, B. T.** Environmental factors governing the infection of mussels, *Mytilus edulis* by *Mytilicola intestinalis*. Fish. Invest. (2) **20** No. 3 1955 : 1-21 7 figs.

**Herbst, H. V.** Untersuchungen zur quantitativen Verteilung des Zooplanktons im Grossen Plöner See. Arch. Hydrobiol. **50** 1955 : 234-290 4 figs.

**Herbst, H. V. (1).** Ein neuer deutscher Calanoide (Crustacea Copepoda), *Diaptomus rostripes* n. sp. Zool. Anz. **155** 1955 : 248-253 12 figs.

**Hessland, I.** Calcareous freshwater sediments from northern Bohustän. Ark. Min. Geol. **1** 2 1950 : 103-167 4 pls. 3 figs.

**Heyningen, H. E. van.** A study on the food of some Daphniidae, Hillerød (Kobenhavns Univ. Ferskvandsbiol. Lab.) 1954 pp. 14.

**Hildebrand, H. H.** A study of the fauna of the pink shrimp (*Penaeus duorarum*; Burkenroad) grounds in the Gulf of Campeche. Publ. Inst. Mar. Sci. Univ. Tex. **4** No. 1 1955 : 169-232 1 fig.

**Hildemann, W. H. and Keighley, G.** Techniques for studies of hemoglobin synthesis in *Daphnia*. Amer. Nat. **89** 1955 : 169-174 1 fig.

**Hill, B. L.** Reclassification of winged *Cythereis* and winged *Brachyocythere*. J. Paleont. **28** 1954 : 804-826 4 pls.

**Hobbs, H. H., Jr.** A new crayfish of the genus *Cambarus* from Mississippi. Proc. biol. Soc. Wash. **68** 1955 : 95-100 11 figs.

**Hobbs, H. H. (1).** A tendency towards cyclic dimorphism in female Crayfishes. Virginia J. Sci. N.S. **6** 4 1955 : 248.

**Hodges, S. see Kent, G. C., Jr. and Hodges, S.**

**Hoenigman, J. see Nouvel, H. and Hoenigman, J.**

**Hoestlandt, H.** Limite nordique de l'extention d'un Crustacé marin de la faune lusitanienne, *Sphaeroma serratum*.

C.R. Acad. Sci. Paris **240** 1955 : 683-685 map.

**Hoestlandt, H. (1).** Étude de populations de *Sphaeroma serratum* le long du littoral de la Grande-Bretagne. C.R. Acad. Sci. Paris **240** 1955 : 916-919 map.

**Holmquist, C.** Die *Mysis relicta* aus dem Mittelmeergebiet (= *Diamysis bahirensis* [G. O. Sars] 1877 und *Paramysis helleri* [G. O. Sars] 1877). Zool. Anz. **154** 1955 : 277-288 7 figs.

**Holthuis, L. B.** Observaciones sobre Los Crustaceos Decapodos de la Republica de El Salvador. Comun. Inst. Trop. Invest. Cient 1954, **3** : 159-166.

**Holthuis, L. B. (1).** Proposed addition to the *Official List of Generic Names in Zoology* of the names of one hundred and two genera of Caridea (Class Crustacea, Order Decapoda), including proposals for the use of the plenary powers (a) to validate the emendation to *Gnathophyllum* of the generic name *Gnathophyllum* Latreille 1814, and (b) to validate the family-group names Hippolytidae Bate, 1888 and Eugonatonotidae Chace, 1937. Bull. zool. Nom. **11** 1955 : 204-228.

**Holthuis, L. B. (2).** The recent genera of the Caridean and Stenopodidean shrimps (Class Crustacea, Order Decapoda, supersection Natantia) with keys for their determination. Zool. Verh. No. 26 1955 : 1-157 104 figs.

**Holthuis, L. B. (3).** Note on the genus *Miyadiella* Kubo (Crustacea Decapoda Penaeidae) with the description of a new species. Vidensk. Medd. fra Dansk. naturh. Foren **117** 1955 : 76-80 2 figs.

**Holthuis, L. B. (4).** *Acantheephyra pulchra* A. Milne Edwards, 1890, a synonym of *Acantheephyra eximia* S. I. Smith, 1884 (Crustacea, Decapoda, Natantia). Pubbl. Staz. zool. Napoli **27** 1955 : 277-282.

**Holthuis, L. B. (5).** A supplementary note on the carcinological work of C. S. Rafinesque. Zool. Meded. **33** 1955 : 279-281.

**Holthuis, L. B. and Gottlieb, E.** The occurrence of the American blue crab, *Callinectes sapidus* Rathbun, in

Israel waters. Bull. res. Council. Israel **5B** 2 1955 : 154-156.

**Holthuis**, L. B. *see* Forest, J. & Holthuis, L. B.

**Honjo**, K. *see* Nakai, Z. & Honjo, K.

**Hornibrook**, N. de B. Ostracoda in the deposits of Pyramid Valley Swamp. Rec. Canterbury [N.Z.] Mus. **6** 4 1955 : 267-277 figs.

**Hoshi**, T. Studies on physiology and ecology of plankton. XI. Influence of  $O_2$ -concentration upon the  $O_2$ -consumption of the daphnid, *Simocephalus vetulus*. Sci. Rep. Tôhoku Univ. (4) **20** 4 1954 : 345-355.

**Howe**, H. V. Handbook of Ostracod taxonomy. Stud. Louisiana State Univ. phys. Sci. Ser. No. 1 1955 XVIII + 386 figs.

**Humes**, A. G. The postembryonic developmental stages of a freshwater calanoid copepod, *Epischura massachusettsensis* Pearse. J. Morph. **96** 1955 : 441-471 83 figs.

**Humes**, A. G. (1). *Mytilicola porrecta* n. sp. (Copepoda : Cyclopoida) from the intestine of marine Pelecypods. J. Parasit. **40** 1954 : 186-194 3 pls.

**Humphries**, C. L. *see* Duhig, M. & Humphries, C. L.

**Hurley**, D. E. Pelagic Amphipods of the sub order *Hyperidea* in New Zealand waters. I.—Systematics. Trans. roy. Soc. N.Z. **83** 1955 : 119-194 1 map 17 figs.

**Hurley**, D. E. (1). Studies on the New Zealand Amphipodan fauna No. 12. The marine families Stegocephalidae and Amphilochidae. Trans. roy. Soc. N.Z. **83** 1955 : 195-221 9 figs.

**Hurley**, D. E. (2). Studies on the New Zealand Amphipodan fauna No. 8. Terrestrial Amphipods of the genus *Talitrus* Latr. Pacif. Sci. **9** 2 1955 : 144-157 4 figs.

**Husson**, R. and **Daum**, J. Über Haltung, Zucht und Biologie von *Asellus cavaticus* Leydig. Ann. Univ. Saraviensis. Naturw. **4** 1-2 1955 : 137-144 1 fig.

**Huzita**, S. Experiments on the effects of various kinds and combinations of fertilizers on the reproduction of

*Cyclops hyalinus*. Bull. Jap. Soc. sci. Fish. **20** 1955 : 873-877. [Japanese with English summary].

**Hynes**, H. B. N. The reproductive cycle of some British freshwater Gammaridae. J. anim. Ecol. **24** 1955 : 352-387 7 figs.

**Hynes**, H. B. N. (1). Distribution of some freshwater Amphipoda in Britain. Verh. int. Ver. Limnol. **12** 1955 : 620-628 5 figs.

**Ikematsu**, W. On the life history of *Metapenaeus joyneri* (Miers) in Ariake Sea. Bull. Jap. Soc. sci. Fish. **20** 1955 : 969-978 9 figs.

**Illg**, P. L. Proposed designation under the plenary powers, for the generic name *Lernaocera* (emend. of *Lerneocera*) Blainville, 1822 (Class Crustacea, Order Copepoda) of a type species in harmony with current nomenclatorial usage. Bull. zool. Nom. **11** 1955 : 252-255.

**Illg**, P. L. (1). A new species of *Parachinotodelphys* (Copepoda : Cyclopoida) with remarks on its systematic position. J. Wash. Acad. Sci. **45** 1955 : 216-224 14 figs.

**Illg**, P. L. *see* Wilson, M. S. & Illg, P. L.

**Isobe**, K. *see* Aikawa, H. & Isobe, K.

**Ito**, T. Cyclopoida copepods of Japanese subterranean waters. Rep. Fac. Fish. Univ. Mie **1** 1954 : 372-416.

**Jacquemart**, J. *see* Leloup, E., Meel, L. van & Jacquemart, S.

**Jashnov**, W. A. *Derjuginia* a new genus of Copepoda of the Polar Basin. Bull. Soc. nat. Moscow Biol. **52** (4) 1947 : 3-9. [Russian with English summary].

**Jashnov**, W. A. (1). The morphology, distribution and systematics of *Calanus finmarchicus* s.l. Zool. Zh., Moscow **34** 1955 : 1210-1223 figs. [In Russian].

**Jefferson**, G. T. A note on some tropical or subtropical barnacles and other animals from the Bristol Channel. Trans. Cardiff Nat. Soc. **82** 1955 : 32-35.

**Jensen**, J. P. Biological observations on the isopod *Sphaeroma hookeri* Leach.



Vidensk. Medd. dansk. naturh. Foren. Kbh. **117** 1955 : 305–339 14 figs.

**John, P. A.** Studies on *Melita zeylanica* an amphipod destructive to submerged wood. Bull. Res. Inst. Univ. Travancore **4C** 1 1955 : 117–126 18 figs.

**Johnson, M. W.** see Boden, B. P., Johnson, M. W. & Brinton, E.

**Jolly, V. H.** A review of the genera *Calamoecia* and *Brunella* (fresh-water Copepoda). Hydrobiologia **7** 1955 : 279–284 figs.

**Joly, R.** Contribution à la connaissance de la faune planctonique des lacs de Barrage.—Le lac du Barrage de la Vaud-Gelade (Creuse). C.R. Ass. franç. Av. Sci. **73** 1953 : 476–478.

**Jones, N. S.** Cumacea of the Benguela Current. 'Discovery' Rep. **27** 1955 : 279–292 7 figs.

**Jordan, H. D.** Control of crabs with crude BHC. Nature, Lond. **175** 1955 : 734–735.

**Jørgensen, C. B.** Quantitative aspects of filter feeding in invertebrates. Biol. Rev. **30** 1955 : 391–454.

**Kaaschieter, J. P. A.** see Drooger, C. W., Kaaschieter, J. P. A. & Key, A. J.

**Kallinowsky, H.** Über den Einfluss exogener Faktoren (Ernährung, Temperatur, Lebensraum) auf Wachstum, Körpergröße und Lebensdauer von *Chirocephalus grubei* Dyr. Z. Morph. Ökol. Tiere **44** 1955 : 196–221 10 figs.

**Kampa, E. M.** Euphausiopsin, a new photosensitive pigment from the eyes of Euphausiid Crustaceans. Nature, Lond. **175** 1955 : 996 2 figs.

**Kampf, W.-D.** see Becker, G. & Kampf, W.-D.

**Karaman, S. L.** Über die Bathynelliden Jugoslaviens. Fragm. balcanica **1** 8 1954 : 69–78 10 figs.

**Karaman, S. L. (1).** Über unsere unterirdische Fauna. Acta Mus. maced. Sci. nat. **1** 9 1954 : 195–216 figs.

**Karaman, S. L. (2).** Weitere Beiträge zur Kenntnis der microparaselliden Mazedoniens, des Genus *Microcharon* Karaman. Fragm. balcanica **1** 12 1954 : 107–114 9 figs.

**Karaman, S. L. (3).** Über eine neue Microceberus—Art aus dem Küstengrundwasser der Adria. Fragm. balcanica **1** 16 1955 : 141–148 15 figs.

**Karaman, S. L. (4).** Über die jugoslavischen Arten des Genus *Monolistra* (Isop.). Acta Mus. maced. Sci. nat. **2** 6 1954 : 125–143 44 figs.

**Karaman, S. L. (5).** *Asellus cavaticus* Schiödte und seine Nachstverwandten. Acta Mus. maced. Sci. nat. **3** 1 1955 : 1–40 127 figs.

**Karaman, S. L. (6).** Novi Amfipodi Podzemne Faune Grčke. Rad. Jugosl. Akad. No. 280 1950 ; 106–114 20 figs. and Bull. Internat. l'Acad. Yugoslava Sci. Beaux. Arts N.S. **3** 1951 : 43–50 figs. [German translation].

**Kayan, J. B.** see Telford, S. R., Lewis, W. H. & Kayan, J. B.

**Keighley, G.** see Hildemann, W. H. & Keighley, G.

**Kent, G. C., Jr. and Hodges, S.** Absence of alterations in gross morphology of developmental rate in *Daphnia magna* subjected to anutrition—S. J. Tenn. Acad. Sci. **30** 1955 : 262–263.

**Kertész, G.** Die Anostraca-Phyllopoden der Natrongewässer bei Farnos. Acta zool., Budapest **1** 1955 : 309–321 7 figs.

**Kesling, R. V.** A new species of *Phlyctiscapha* from the Middle Devonian Ferron Point formation of Michigan. Contr. Mus. Geol. Univ. Mich. **11** 9 1954 : 187–192 pl. 1.

**Kesling, R. V. (1).** Ostracods from the Middle Devonian Dundee limestone in northwestern Ohio. Contr. Mus. Geol. Univ. Mich. **11** 8 1954 : 167–186 pls. 1–3.

**Kesling, R. V. (2).** An instrument for cleaning small fossils. Contr. Mus. Paleont. Univ. Michigan **11** 1954 : 193–199 2 pls.

**Kesling, R. V. (3).** Oncotectomoninae, a new subfamily of Entomoconchid ostracods from the Middle Devonian of New York. J. Paleont. **28** 5 1954 : 575–580 pl. 59 1 text-fig.

**Kesling, R. V. (4).** A new occurrence of *Oncotectomonus chemotus* Kesling, a middle Devonian Entomoconchid Ostracod. Contr. Mus. Paleont. Univ. Michigan **12** 1955 : 175–178 1 pl.

**Kesling, R. V. (5).** Notes on two Ordovician Ostracods from Estonia. Contr. Mus. Paleont. Univ. Michigan **12** 1955 : 259-272 figs.

**Kesling, R. V. (6).** Two new species of Ostracods from the Centerfield limestone of Western New York. Contr. Mus. Paleont. Univ. Michigan **12** 1955 : 273-284 3 pls.

**Kesling, R. V. and Copeland, M. J.** A new Kirkbyid ostracod from the Wanakah member of the middle Devonian Ludlowville formation in Western New York. Contr. Mus. Geol. Univ. Mich. **11** 7 1954 : 153-165 pls. 1-2 1 text-fig.

**Kesling, R. V. and Kilgore, J. E.** *Bairdia epicypha*, new name for *Bairdia gibbera* Kesling & Kilgore, 1952, non Morey, 1935. J. Paleont. **29** 1 1955 : 189.

**Key, A. J.** see Drooger, C. W., Kaaschieter, J. P. A. & Key, A. J.

**Kiefer, F.** Die Lebensgemeinschaft "Plankton" des Bodensees. Aus der Heimat **63** 1955 : 201-211 figs.

**Kiefer, F. (1).** Zur Kenntnis der freilebenden Ruderfusskrebse des Bodensees. Beitr. naturk. Forsch. S.W. Deutsch. **13** 1954 : 86-92 10 text figs.

**Kiefer, F. (2).** Freilebenden Ruderfusskrebse (Crustacea Copepoda) aus Binnengewässern Marokkos. Bull. Soc. Sci. nat. phys. Maroc **34** 1954 : 317-336 44 text figs.

**Kiefer, F. (3).** Freilebenden Ruderfusskrebse (Crustacea Copepoda) aus Türkischen Binnengewässern. Hydrobiologi, Istanbul **2B** 2 1955 : 108-132 63 figs.

**Kiefer, F. (4).** Eine kleine Cyclopiden Ausbeute aus norditalienischen Subterrariengewässern. Mem. Mus. civ. Stor. nat. Verona **4** 1954 : 163-165 1 fig.

**Kiefer, F. (5).** Einige Cyclopiden aus südfranzösischen Höhlen. Notes biospeol. **9** 1954 : 157-165 16 text-figs.

**Kiefer, F. (6).** Neue Cyclopoida Gnathostoma (Crustacea Copepoda) aus Madagaskar. II. Cyclopinae. Zool. Anz. **154** 1955 : 222-232 33 figs.

**Kiknadze, I. I.** [Changes in nucleic acids at fertilization and de-

velopment of the Cyclops egg]. C.R. Acad. Sci. URSS. **100** 3 1955 : 571-574 fig. [In Russian].

**Kilfoyle, C. F.** Catalog of type specimens of fossils in the New York State Museum. Supplement 4. Bull. N.Y. St. Mus. No. 348 1954 : 1-719.

**Kilgore, J. E.** see Kesling, R. V. and Kilgore, J. E.

**Kinnè, O.** *Neomysis vulgaris* Thompson, eine autokologisch-biologische Studien. Biol. Zbl. **74** 3-4 1955 : 160-202 figs.

**Klawe, W. L.** *Pseudomma affine* G. O. Sars : an addition to the list of the Mysidacea of Eastern Canada. Canad. Fld. Nat. **69** 2 1955 : 66.

**Kleerekoper, H.** Limnological observations in Northeastern Rio Grande do Sul, Brazil I. Arch. Hydrobiol. **50** 1955 : 553-567 1 fig.

**Knight-Jones, E. W.** The gregarious settling reaction of barnacles as a measure of systematic affinity. Nature, Lond. **175** 1955 : 266.

**Knight-Jones, E. W. and Qasim, S. Z.** Responses of some marine plankton animals to changes in hydrostatic pressure. Nature, Lond. **175** 1955 : 941.

**Knowles, F. G. W., Carlisle, D. B. and Dupont-Raabe, M.** Studies on pigment-activating substances in animals. I. The separation by paper electrophoresis of chromactivating substances in arthropods. J. Mar. biol. Ass. U.K. **34** 1955 : 611-635 2 pls. 6 figs.

**Knowles, F.** see Carlisle, D., Dupont-Raabe, M. & Knowles, F., also Lerma, B-de, Dupont-Raabe, M. & Knowles, F.

**Kobayashi, T.** Fossil estherians and allied fossils. J. Fac. Sci. Univ. Tokyo Sect. II **9** 1 1954 : 1-192.

**Kobyakova, Z. I.** [New species of Crustacea, Decapoda from the Southern part of Kurile-Sakhalin region]. Trav. Inst. zool. Acad. Sci. URSS. **18** 1955 : 235-242 7 figs. [In Russian].

**Koepcke, H.-W.** Welche Bedeutung hat die Maxillula für die Systematik der Gattung *Idotea*. Kieler Meeresforsch. **11** 1955 : 250-252 1 fig.

**Kojima, Y.** Notes on spermatogenesis of *Daphnia pulex*. Zool. Mag., Tokyo **64** 1955 : 157-161.

**Kon, S. K.** see Fisher, L. R., Kon, S. K., Plack, P. A. & Thompson, S. Y., also Fisher, L. R. & Thompson, S. Y.

**Konishi, J.** Electrical studies on the compound eye of *Eriocheir japonicus* De Haan. Rep. Fac. Fish. Univ. Mie **2** 1955 : 145-150.

**Konishi, J. (1).** Retinal and optic nerve response of the compound eye of spiny lobster (*Panulirus japonicus* (von Siebold)). Rep. Fac. Fish. Univ. Mie **2** 1955 : 138-144.

**Korobkov, I. A.** see Vistelius, A. B., Korobkov, I. A., Romanova, M. A. & Semenovich, V. N.

**Kow, Ah T.** The Shrimp Industry of Singapore. Proc. Indo-Pacif. Fish. Council. **5** 1955 : 145-155 figs.

**Kozhov, M. M.** [Seasonal and annual changes in plankton of Lake Baikal]. Trud. Vsesoyuz. Gidrobiol. Obshch. **6** 1955 : 133-157.

**Kozhov, M. M. (1).** [New data on the life of the waters in the lake Baikal]. Zool. Zh. **34** 1 1955 : 17-45 27 diagrs. [In Russian].

**Krömmelbein, K.** *Polyzygia gürichiana* n. n. pro *Polyzygia gürichi* Krömmelbein 1953 (Ostracoda). Senckenbergiana, Lethaea **35** 1955 : 371.

**Kubo, I.** On the mass growth of the prawn, *Penaeus japonicus* Bate. Bull. Jap. Soc. Sci. Fish. **20** 1955 : 870-872 2 figs.

**Kubo, I. (1).** A new Palinurid, *Nupalirus japonicus* gen. et sp. nov. J. Tokyo Univ. Fish. **41** 1955 : 185-188 2 pls.

**Kubo, I. (2).** Systematic studies on the Japanese macrurous decapod crustacea. I. On *Metapenaeus burkenroadi*, sp. nov. Zool. Mag., Tokyo **64** 1955 : 24-27.

**Kudo, Y.** see Ozawa, T., Takesige, T. & Unno, H.

**Kuenen, D. J.** Oecologie van enkele landisopoden. Vakbl. Biol. **45** 3 1955 : 33-44.

**Kunz, H.** see Chappuis, P. A. & Kunz, H.

**Kurien, C. V.** Contributions to the study of the crustacean fauna of

Travancore. Bull. centr. res. Inst. Univ. Travancore **3C** 1 1954 : 69-91 3 figs.

**Kusakin, O. G.** [To the systematics of some species of Idothea (Isopoda, Valvifera) for the Far-Eastern seas of U.S.S.R.]. Trav. Inst. zool. Acad. Sci. URSS. **18** 1955 219-227 3 figs. [In Russian].

**Kusakin, O. G. (1).** [New for Far-Eastern waters U.S.S.R.—The warm-water families of Isopoda]. Trav. Inst. zool. Acad. Sci. URSS. **18** 1955 : 228-234 4 figs. [In Russian].

**Kusmorskaya, A. P.** [Seasonal and annual changes in zooplankton of the Black Sea]. Trud. Vsesoyuz. Gidrobiol. Obshch. **6** 1955 : 158-192 15 graphs. [In Russian].

**Lagerspetz, K.** Physiological studies on the brackish water tolerance of some species of *Daphnia*. Arch. Soc. zool.-bot. fenn. **9** Suppl. 1955 : 138-143.

**Lambertsen, G. and Braekhan, O. R.** A possible new vitamin A<sub>1</sub> isomer in the eyes of crustaceans. Nature, Lond. **176** 1955 : 553-554.

**Lang, K.** Tanaidacea from Tropical West Africa. Atlantide Rep. **3** Copenh. 1955 : 57-81 figs. 1-15.

**Lapchik, F. E.** [New data on Peruvian and Triassic deposits of the Dnieper-Donetz depression. Bull. Acad. Sci. URSS. geol. **6** 1955 : 59-69. [In Russian].

**Larsson, U.** *Pontoporeia affinis* från Humeln i Småland. Fauna o. flora **50** 1 1955 : 47-48.

**Lathin, G. De.** Zur Populationsgenetik geschlechtsbeeinflussender Farbfaktoren bei Porcellioniden (Crust. Isop.). Caryologia. **6** Suppl. Atti IX Congr. Internat. Genet. pt. 2 1954 : 883-888 2 figs.

**Lauffer, M. A. and Swaby, L. G.** The size shape and hydration of lobster hemocyanin. Biol. Bull. Woods Hole **108** 1955 : 290-295.

**Lefèvre, P. and Lucas, G.** Étude de quelques sédiments marins des environs de Concarneau (Finistère). Bull. Inst. oceanogr. Monaco No. 1062 1955 : 1-36 6 figs.



**Legrand, J.-J.** Rôle endocrinien du tissu nourricier dans le testicule des crustacés isopodes terrestres. C.R. Acad. Sci. Paris **240** 1955 : 120-122.

**Legrand, J.-J. (1).** Rôle endocrinien de l'ovaire dans la différenciation des oostégites chez les crustacés isopodes terrestres. C.R. Acad. Sci. Paris **241** 1955 : 1083-1085.

**Legrand, J.-J. (2).** Faune isopodique des îles atlantiques françaises et paléogéographie quaternaire. C.R. Ass. franç. Av. Sci. **73** 1955 : 475-476.

**Legrand, J.-J. (3).** Les isopodes terrestres du Poitou et du littoral Charentais. Mém. Mus. Hist. nat. Paris N.S. **6A** 3 1954 : 139-180 figs.

**Lehmann, W. M.** *Vachonia rogeri* n. g. n. sp. ein Branchiopod aus dem unterdevonischen Hunsrückschiefer. Paleont. Z. **29** 3-4 1955 : 126-130 pls. 11-12 text-figs. 1-2.

**Lellák, J.** The Chironomidae and other bottom fauna of some stagnant waters in the Central Lake (Elbe) region. Rozpr. české Akad. **63** 8-9 1953 : 1-142 figs. [English summary].

**Leloup, E., Meel, L. van and Jacquemart, S.** Recherches hydrobiologique sur trois mares d'eau douce des environs de Liège. Mém. Inst. Sci. nat. Belg. No. 131 1954 : 1-145 4 pls. 18 figs.

**Lemos de Castro, A.** Descrição do alótipo macho de *Argulus multicolor* Stekhoven, 1937 (Branchiura, Argulidae). Arq. Mus. nac. Rio de J. **42** 1 1951 and 1955 : 159-160 2 pls.

**Lemos de Castro, A., see also** Castro, A. L. de.

**Lenel, R.** Complément à l'étude des pigments caroténoïdes de la carapace du crabe *Carcinus maenas* Pennant. C.R. Acad. Sci. Paris **240** 1955 : 2020-2022.

**Lenel, R. (1).** Évolution des pigments caroténoïdes de l'hypoderme au cours de la formation des nouveaux téguments chez la crabe *Carcinus maenas*. C.R. Acad. Sci. Paris **241** 1955 : 662-664.

**Lenel, R. see** Veillet, A., Balesdent-Marquet, M.-L., Vernet-Cornubert, G. & Lenel, R.

**Lenz, F.** Die Bodenfauna des Lago Maggiore und ihre Lebensbedin-

gungen. Mem. Ist. Ital. Idrobiol. **8** 1954 : 273-322.

**Lerma, B. de, Dupont-Raabe, N. & Knowles, F.** Sur la question de la fluorescence des substances chromactives des crustacés et des insectes. C.R. Acad. Sci. Paris **241** 1955 : 995-998 figs.

**Levi, C. see** Bocquet, C. & Levi, C.

**Lewis, J. B.** Some larval Euphausiids of the genus *Stylocheiron* from the Florida current. Bull. mar. Sci. Gulf & Caribbean **5** 3 1955 : 190-202 7 figs.

**Lewis, W. H.** Monoecious tendencies in the crayfish, *Cambarus longulus longulus* Girard. Virginia J. Sci. N.S. **6** 3 1955 : 146-148 4 figs.

**Lewis, W. H. see** Telford, S. R., Lewis, W. H. & Kayan, J. B.

**Lieder, U.** Eine Bemerkung zur Artzugehörigkeit der von A. Sklower in Nord-Rhodesien und von I. M. Szabó in Ungarn gefundenen *Bosminen*. Arch. Hydrobiol. **50** 1955 : 142.

**Lindberg, K.** Report no. 3 from Professor T. Gislen's Expedition to Australia in 1951-1952. Cyclopides (Crustacés Copépodes) de l'Australie. Acta Univ. lund. N.F. **49** 5 1954 : 1-8.

**Lindberg, K. (1).** Cyclopoides (Crustacés Copépodes) du Mexique. Ark. Zool. **7** 1955 : 459-489 5 figs.

**Lindberg, K. (3).** Cyclopides (Crustacés Copepodes) de la Turquie. Hydrobiologi, Istanbul **2B** 2 1955 : 101-107.

**Lindberg, K. (4).** Cyclopides (Crustacés Copépodes) d'îles du Pacifique Sud (Mélanésie et Micronésie) et de Bornéo. K. fys. Sällsk. Lund Förh. **24** 1955 : 161-174 4 figs.

**Lindberg, R. G.** Growth, population dynamics, and field behavior in the spiny lobster, *Panulirus interruptus* (Randall). Univ. Calif. Pubs. Zool. **59** 1955 : 157-248 7 pls. 16 figs.

**Linder, M. J. see** Anderson, W. W. & Linder, M. J.

**Löffler, H.** Die Boeckelliden Perus. Ergebnis der Expedition Brundin und der Andenkundfahrt unter Prof. Dr. Kinzl 1953/54. S.B. öst. Akad. Wiss. Abt. I **164** 9 1955 : 723-746 31 figs.

**Loidl, R.** Ein Wasserfloh legt Eier. *Mikrokosmos* **44** 1955 : 145-148 10 figs.

**Lomakina, N. B.** [Cumacea from Far Eastern seas]. *Trav. Inst. zool. Acad. Sci. URSS.* **18** 1955 : 112-165 51 figs. [In Russian].

**Lomakina, N. B. (1).** [*Pavlovskoeola campylaspoides*, new species of Cumacea (Nannastacidae)]. *Trav. Inst. zool. Acad. Sci. URSS.* **21** 1955 : 190-192. [In Russian].

**Longhurst, A. R.** Evolution in the Notostraca. *Evolution* **9** 1955 : 84-86.

**Longhurst, A. R. (1).** The reproduction and cytology of the Notostraca (Crustacea, Phyllopoda). *Proc. zool. Soc. Lond.* **125** 1955 : 671-680 5 figs.

**Longhurst, A. R. (2).** A review of the Notostraca. *Bull. Brit. Mus. (nat. Hist.) Zool.* **3** 1 1955 : 1-57 16 figs.

**Lubni-Gertzik, E. A.** [Some data on plankton distribution in the superficial waters round the Kurile Islands of the Pacific]. *C.R. Acad. Sci. URSS* **101** 3 1955 : 561-564 2 figs. [In Russian].

**Lubni-Gertzik, E. A. (1).** [Planktonic organisms as indicator of currents]. *Trud. Inst. Okeanol.* **13** 1955 : 67-70 2 maps. [In Russian].

**Lucas, G.** *see* Lefèvre, P. & Lucas, G.

**Lüttig, G.** Die Ostrakoden des Interglazials von Elze. *Paläont. Z.* **29** 3-4 1955 : 146-169 pls. 16-19 text-figs. 1-2.

**Lyakhnovich, V. P.** [The numerical share of zooplankton in the fish-farming ponds]. *Trud. Vsesoyuz. Hidrobiol. Obshch.* **6** 1955 : 211-216 3 graphs. [In Russian].

**Mabillot, S.** Contribution à l'étude histophysiologique de l'appareil digestif de *Gammarus pulex* L. *Arch. Zool. exp. gén.* **92** 1955 : Notes et Rev. 20-38 15 figs.

**McGinitie, G. E.** Distribution and ecology of the marine invertebrates of Point Barrow, Alaska. *Smithson. Misc. Coll.* **128** 9 1955 : 1-201 (147) 8 pls.

**McGinty, M. S.** *see* Fincher, J. A. & McGinty, M. S.

**McMillan, N. F.** Crustacea, Amphipoda : Cheshire records, 1947-52. *Rep. Lancs. Chesh. Fauna Comm.* 30th [1954] : 68.

**McNeill, F.** *see* Stephenson, W. & McNeill, F.

**McWhinnie, M. A. and Sweeney, H. M.** The demonstration of two chromatophorotropically active substances in the land isopod, *Trachelipus rathkei*. *Biol. Bull. Woods Hole* **108** 1955 : 160-174 9 figs.

**Mahmoud, M. F.** Some notes on the biology of the terrestrial isopod *Porcellio laevis* Latreille. *Bull. zool. Soc. Egypt* **12** 1954 : 33-41 2 figs.

**Makhnach, A. S.** *see* Stefanenko, A. & Makhnach, A. S.

**Małaczyńska-Suchsitz, Z.** Observations on the manner in which newly hatched crayfish are attached to the pleopods of the female. *Prace Kom. biol., Poznań* **15** 6 1955 : 1-117 8 pls. [English summary].

**Malaviya, R. B.** Parasitism of *Ambassis ranga*, H.B. by *Argulus siamensis* subsp. *peninsularis* Ramkrishna. *Curr. Sci.* **24** 8 1955 : 275.

**Manolache, C.** *see* Dobreanu, E., Manolache, C. & Puscariu, V. and Carausu, S., Dobreanu, E. & Manolache, C.

**Manuilova, E. F.** [Variation of the pelagic Cladocerans in connection with the development of bacteria in the water-reservoir]. *C.R. Acad. Sci. URSS.* **103** 6 1955 : 1111-1114 2 figs. [In Russian].

**Margalef, R.** Contribución al estudio de la fauna de las aguas dulces del noroeste de España. *Publ. Inst. Biol. apl. Barcelona* **21** 1955 : 137-171 14 figs. [English summary].

**Margalef, R. (1).** Datos para el estudio de la distribución de los crustáceos en las aguas continentales españolas. *Publ. Inst. Biol. apl. Barcelona* **21** 1955 : 173-177.

**Margalef, R. (2).** Temperature and morphology in freshwater organisms. *Verh. int. Ver. Limnol.* **12** 1955 : 507-514.

**Margalef, R. and Balcells, E.** Crustáceos interesantes de las aguas salobres de Guipúzcoa. *Munibe, San Sebastian* 1951 : 1-4 1 fig.

**Margolis, L.** *Delphinapterus leucas*, a new host record for the whale-louse, *Paracymus nodosus* (Lütken). J. Parasit. **40** 1954 : 365.

**Marshall, S. M. and Orr, A. P.** The biology of a marine copepod *Calanus finmarchicus* (Gunner). Edinburgh & London (Oliver & Boyd) 1955, pp. vii + 188 frontis, 17 pls. 63 figs.

**Marshall, S. M. and Orr, A. P. (1).** Experimental feeding of the Copepod *Calanus finmarchicus* (Gunner) on phytoplankton cultures labelled with radioactive carbon ( $^{14}\text{C}$ ). Deep-Sea Res. **3** Suppl. 1955 : 110-114.

**Marshall, S. M. and Orr, A. P. (2).** Hatching in *Calanus finmarchicus* and some other Copepods. J. Mar. biol. Ass. U.K. **33** 1954 : 393-401 1 pl. 5 text figs.

**Marshall, S. M. and Orr, A. P. (3).** On the biology of *Calanus finmarchicus*. VIII. Food uptake, assimilation and excretion in adult and stage V *Calanus*. J. Mar. biol. Ass. U.K. **34** 1955 : 495-529 4 figs.

**Marshall, S. M. see** Harding, J. P. & Marshall, S. M.

**Massal, L. (1).** Première note sur le milieu et la croissance de Esthérias (Crustacés Phyllopo des Conchostracés). Bull. Soc. Sci. nat. Tunis **6** 1954 : 181-190 1 pl. 3 figs.

**Massal, L. (2).** Deuxième note sur le milieu et la croissance des Esthérias (Crustacés Phyllopo des Conchostracés). Bull. Soc. Sci. nat. Tunis **7** 1954 : 163-181 4 figs.

**Massal, L. (3).** Sur la proportion des sexes chez quelques espèces de Phyllopo des Anostracés d'eau douce en Tunisie. C.R. Ass. franç. Av. Sci. **70** 4 pt. 1 1951 : 20-27.

**Matsakis, J.** Contribution à l'étude du développement postembryonnaire et de la croissance des Oniscoides. Bull. Soc. zool. Fr. **80** 1955 : 52-65 6 figs.

**Matsakis, J. (1).** Développement postembryonnaire chez *Ligia italica*. Vie et Milieu **6** 1955 : 113-119 2 figs.

**Matsui, K.** The electrocardiogram of the lobster, *Palinurus japonicus*. Sci. Rep. Tokyo Bunrika Daig. **7B** 113 1955 : 231-256 19 figs.

**Matsui, K. (1).** Spontaneous discharges of the isolated ganglionic trunk of the lobster heart (*Panulirus japonicus*). Sci. Rep. Tokyo Kyoiku Daig. **8B** 1955 : 257-268 5 figs.

**Matsumoto, K.** On the sacculinization of *Charybdis japonica* (A. Milne-Edwards). Biol. J. Okayama Univ. **1** 1-2 1952 : 84-89 3 figs.

**Matsumoto, K. (1).** Chromatophorotrophic activity of the neurosecretory cells in the thoracic ganglion of *Eriocheir japonicus*. Biol. J. Okayama Univ. **1** 4 1954 : 234-248 7 figs.

**Matsumoto, K. (2).** On the male crab, *Potamon*, having the ovotestis. Biol. J. Okayama Univ. **2** 2-3 1955 : 75-84 2 pls. 1 fig.

**Matsumoto, K. (3).** Neurosecretion of the thoracic ganglion of *Chionoectes opilio* O. Fabricius. Zool. Mag., Tokyo **64** 1955 : 361-365.

**Matsumoto, K. (4).** Neurosecretion of the brain of *Chionoectes opilio* O. Fabricius. Zool. Mag., Tokyo **64** 1955 : 366-369.

**Matthews, D. C.** Feeding habits of the sand crab *Hippa pacifica* (Dana). Pacif. Sci. **9** 4 1955 : 382-386.

**Maxfield, M. and Hartley, R. W., Jr.** Two proteins purified from lobster nerve extract. J. biophys. & biochem. Cytol. **1** 4 1955 : 279-286 5 figs. [Not seen].

**Maynard, D. M.** Activity in a crustacean ganglion. II. Pattern and interaction in burst formation. Biol. Bull. Woods Hole **109** 1955 : 420-436 10 figs.

**Mayrat, A.** Mise en évidence de tendons chez les crustacés dans le muscle attracteur du sinciput de *Praunus flexuosus* O. F. Müller. Bull. Soc. zool. Fr. **80** 1955 : 81-85 2 figs.

**Mazepova, G. F.** [New form of *Eucyclops serrulatus* (Fisch.) from Lake Baikal]. Trav. Inst. zool. Acad. Sci. URSS. **18** 1955 : 106-111 5 figs. [In Russian].

**Meel, L. van see** Leloup, E., Meel, L. van & Jacquemart, S.

**Menon, M. K.** On the paddy field prawn fishery of Travancore-Cochin and an experiment in prawn culture. Proc. Indo-Pacif. Fish. Council. **5** 1955 : 131-135.



**Menyailenko, P. A.** *see* Semikhatova, S. V. & Menyailenko, P. A.

**Menzel, R. W.** Marking of shrimp. *Science* **121** 1955 : 446.

**Menzies, R. J., Bowman, T. E. and Alverson, F. G.** Studies on the biology of the fish parasite *Livoneca convexa* Richardson (Crustacea, Isopoda, Cymothidae). *Wasmann J. Biol.* **13** 2 1955 : 277-295 7 figs.

**Menzies, R. J. and Miller, M. A.** A redescription of the marine isopod crustacean "*Exosphaeroma*" *faxonii* Richardson from Texas. *Bull. mar. Sci. Gulf & Caribbean* **5** 4 1955 : 292-296 2 figs.

**Menzies, R. J. and Miller, M. A.** (1). Marine asellote isopods of the genus *Antias* with the description of a new species from New Zealand. *Trans. roy. Soc. N.Z.* **83** 1955 : 383-389 2 figs.

**Menzies, R. J. and Widrig, T. M.** Aggregation by the marine wood-boring isopod, *Limnoria*. *Oikos* **6** 1955 : 149-152.

**Messina, A. R.** *see* Ellis, B. E. & Messina, A. R.

**Metzler, S.** Über die Beeinflussbarkeit des Geschlechtsverhältnisses bei *Cyclops viridis* Jurine. *Naturwissenschaften* **42** 18 1955 : 517-518.

**Meyer, M. C. and Barden, A. A., Jr.** Leeches symbiotic on Arthropoda, especially decapod Crustacea. *Wasmann J. Biol.* **13** 1955 : 297-311.

**Miller, M. A.** *see* Menzies, R. J. & Miller, M. A.

**Miller, M. A.** *see* Menzies, R. J. & Miller, M. A. (1).

**Milne, A.** *see* Clark, R. B. & Milne, A.

**Milutin, G. O.** One hundred and five years of the hydrobiological research in the peoples republic Bosnia and Hercegovina. *Acta Ichthyol. Bosniae* **2** No. 5 1955 : 1-50 12 pls.

**Miyawaki, M.** Neurosecretory cells of the crab *Telmessus cheiragonus* (Tilesius) in the living condition. *Annot. zool. jap.* **28** 1955 : 163-166 9 figs.

**Miyawaki, M.** (1). Observations on the pericardial organ in two kinds of crabs, *Paralithodes brevipes* Brandt and *Telmessus cheiragonus* Tilesius. *Zool. Mag., Tokyo* **64** 1955 : 137-140.

**Monod, T.** Sur une larve de gnathidé (*Praniza milloti* nov. sp.) parasite du coelacanthé. *Mém. Inst. Sci. Madagascar* **9A** 1955 : 91-94 11 figs.

**Monod, T.** (1). Réunion carcinologique de Cadaqués-Banyuls (25 juillet-6 août 1953). *Vie et Milieu* **6** 1955 : 393-396.

**Monod, T.** (2). Sur un nouveau *Corophium* constructeur de masses spongiomorphes aux Philippines. *Bull. Mus. Hist. nat. Paris* (2) **27** 1955 : 196-206 17 figs.

**Moore, H. B.** Variations in temperature and light response within a plankton population. *Biol. Bull. Woods Hole* **108** 1955 : 175-181 4 figs.

**Moroni, A.** Primi risultati e metodologia delle ricerche idrobiologiche al lago Santo Parmense. *Boll. Zool.* **21** 1954 : 223-229 1 fig.

**Moroni, A.** (1). Ricerche idrobiologiche sui laghi dell'Appennino Parmense. *Boll. Zool.* **22** fasc. 2 1955 : 165-180 1 pl.

**Motoda, S. and Anraku, M.** An observation on the vertical distribution of plankton at Ishikari Bay. *Hokkaido pp.* 194-201. [Japanese 1951].

**Motoda, S. and Anraku, M.** (1). Marine plankton copepods from the Hachijo Island, Idzu Is. with special reference to their vertical distribution. *Rec. oceanogr. Works Jap.* **2** 1955 : 210-214.

**Motoda, S. and Anraku, M.** (2). The variability of catches in vertical plankton hauls. *Bull. Fac. Fish. Univ. Hokkaido* **6** 1955 : 152-172.

**Moyes, J. and Vigneaux, M.** Observations sur des Ostracodes des couches aquitaniennes de Villandraut (Gironde). *C.R. Soc. géol. Fr.* **16** 1954 : 413-414.

**Müller, A. H.** Über einen Neufund von *Halicyna plana* und die systematische Stellung von *Halicyna* (Crustacea?). *Paläont. Z.* **29** 3-4 1955 : 131-135 pl. 13.

**Muthe, P. T.** *see* George, C. J., Reuben, N. & Muthe, P. T. and George, C. J., Nair, K. K. & Muthe, P. T.

**Nagabhushanam, R.** *see* Ganapati, P. N. & Nagabhushanam, R.

**Nagano, T.** The behaviour of Crustacea exposed to colored light. Bull. mar. biol. Sta. Asamushi **7** 2-4 1955 : 44-49 3 figs.

**Nair, K. K.** *see* George, C. J., Nair, K. K. & Muthe, P. T.

**Nakai, Z.** On the methodology of marine plankton collection, with a suggested classification. Symp. mar. freshw. Plank. Inda Pac. 1954 : 1-7.

**Nakai, Z. (1).** Species of food plankton for baleen whales in the sea adjacent to Japan. Tokai reg. Fish. Res. Lab. Spec. Publ. No. 3 1954 : 1-6.

**Nakai, Z. (2).** The recent sea fisheries in Japan and their resources. Tokai reg. Fish. Res. Lab. Spec. Publ. No. 5 1955 : 1-8.

**Nakai, Z. (3).** Recent trends in planktonological researches in Japan. Tokai reg. Fish. Res. Lab. Spec. Publ. No. 5 1955 : 9-11.

**Nakai, Z. (4).** The chemical composition, volume, weight, and size of the important marine plankton. Tokai reg. Fish. Res. Lab. Spec. Publ. No. 5 1955 : 12-24.

**Nakai, Z. and Honjo, K.** A preliminary report on surveys of plankton and salmon stomach contents from the North Pacific, 1952. Tokai reg. Fish. Res. Lab. Spec. Publ. No. 3 1954 : 6-12.

**Nayar, K. K. and Parameswaran, R.** Succinic dehydrogenase in the neurosecretory cells of the thoracic ganglia of the crab. Curr. Sci. **24** 10 1955 : 341 1 fig.

**Naylor, E.** The ecological distribution of British species of *Idotea*. J. anim. Ecol. **24** 1955 : 255-269 3 figs.

**Naylor, E. (1).** The life cycle of the isopod *Idotea emarginata* (Fabricius). J. anim. Ecol. **24** 1955 : 270-281 8 figs.

**Naylor, E. (2).** The diet and feeding mechanism of *Idotea*. J. Mar. biol. Ass. U.K. **34** 1955 : 347-355 2 figs.

**Naylor, E. (3).** The comparative external morphology and revised taxonomy of the British species of *Idotea*. J. Mar. biol. Ass. U.K. **34** 1955 : 467-493 11 figs.

**Needham, A. E.** Nitrogen excretion in *Carcinides maenas* (Pennant)

during the early stages of regeneration. J. Embryol. exp. Morph. **3** 1955 : 189-212 1 fig.

**Nilsson-Cantell, C. A.** Cirripedia. Rep. Swed. Deep-Sea Exp. **2** Zool. 1955 : 215-220 figs.

**Noodt, W.** Eine neue *Parastenocaris* (Copepoda Harpacticoidea) als Vertreterin limnischen Mesopsammons aus Südamerika. Arch. Hydrobiol. **50** 1955 : 76-81 7 figs.

**Noodt, W. (1).** Sandstrand copepoden von der schwedischen Ostküste. K. fysiogr. Sällsk. Lund Förh. **24** 1955 : 175-182 11 figs.

**Noodt, W. (2).** Marine Harpacticoidea (Crust. Cop.) aus dem Marmara Meer. Rev. Fac. Sci. Univ. Istanbul **20B** 1-2 1955 : 49-54 103 figs.

**Noodt, W. (3).** Limnisch-subterrane Harpacticoidea (Crust. Cop.) aus Norditalien. Zool. Anz. **154** 1955 : 78-85 23 figs.

**Noodt, W. (4).** Copepoda Harpacticoidea von Teneriffa (Kanarische Inseln). Zool. Anz. **154** 1955 : 200-222 32 figs.

**Noodt, W. (5).** Die Verbreitung des Genus *Parastenocaris* ein Beispiel einer subterranean Crustaceen-Gruppe. Verh. dtsch. zool. Ges. **1954** 1955 : 429-435.

**Nordenstam, Å.** A new isopod from the deep sea. Rep. Sw. Deep-Sea Exped. **2** 2 1955 : 203-212 3 figs.

**Nouvel, H. and Hoenigman, J.** *Amallocystis boschmai* Nouvel 1954 Ellobiopsid parasite du Mysidacé *Leptomysis gracilis* G. O. Sars. Vie et Milieu 1955 (Suppl.) No. 26 : 17-18 figs.

**Novozhilov, N. I.** [New bivalve phyllopoda, Asmusiidae of the upper Devonian and lower Carboniferous]. C.R. Acad. Sci. URSS. **100** 4 1955 : 787-788 fig. [In Russian].

**Novozhilov, N. I. (1).** [Cirripedia from the middle Devonian of the Southern Siberia]. C.R. Acad. Sci. URSS. **100** 6 1955 : 1161-1162 2 figs. [In Russian].

**Novozhilov, N. I. (2).** [Fossil phyllopods from the Devonian of the lower course of the river Southern Torgalik]. C.R. Acad. Sci. URSS. **102** 1 1955 : 153-155 pl. [In Russian].

**Nunes-Ruivo, L.** *see* Delamare-Deboutteville, C. & Nunes Ruivo, L. P.

**Ogilvie, H. S.** Copepod nauplii (1). Fiches d'Identification. Cons. internat. Explor. Mer. Zooplankton No. 50 1953 : 1-3 figs.

**Oguero, C.** On the sacculinization of the hermit-crab, *Eupagurus ochotensis* Brandt. Annot. zool. jap. **28** 1955 : 100-105 2 figs.

**Ohm, P. and Remmert, H.** Etudes sur les rockpools des Pyrénées-Orientales. Vie et Milieu **6** 1955 : 194-208 5 figs.

**Oliva, O. and Sladěček, V.** [Harm caused by Cyclops on young Fishes]. Akvarist. listy **22** 1950 : 13. [Czech only].

**Oliveira, L. P. H. de.** Sobre a presença do copepodo *Mesocyclops longisetus* (Th.) no plancton de uma laguna litorânea. Mem. Inst. Osw. Cruz. **52** 1 1954 : 239-244 2 pls.

**Oliveira, L. P. H. de (1).** *Phoxocephalus capuciatius*, nova espécie de Crustacea Amphipoda, Phoxocephalidae. Mem. Inst. Osw. Cruz **53** 1955 : 313-317 2 pls.

**Oliveira, L. P. H. de (2).** Descrição e análise geométrica de *Autonoe conicurveae*, nova espécie de crustáceo (Amphipoda, Aoridae). Mem. Inst. Osw. Cruz **53** 2-4 1955 : 345-362 2 pls.

**Oliveira, L. P. H. de (3).** Nova espécie de crustáceo Amphipoda da Baía de Guanabara: *Ampelisca soleata*. Mem. Inst. Osw. Cruz **52** 3-4 1955 : 603-618 3 pls. [English transl.].

**Olivier, S. R.** Una nueva especie del género "*Moina*" (Crust. Cladocera). Notas Mus. Eva Perón **17** 1954 : 81-86 8 figs.

**Olivier, S. R. (1).** Cladóceros marinos de la Argentina. Notas Mus. Eva Perón **17** 1954 : 157-166 3 figs.

**Orr, A. P.** *see* Marshall, S. M. & Orr, A. P.

**Orr, P. R.** Heat death. I. Time temperature relationships in marine animals. Physiol. Zool. **28** 1955 : 290-294 1 fig.

**Østvedt, O.-J.** Zooplankton investigations from Weather Ship M in the

Norwegian Sea, 1948-49. Hvalrad. Skr. Nr. 40 1955 : 1-93 25 figs.

**Otsu, T. and Hanaoka, K. I.** Seasonal changes in the growth reaction of plants to the eye-stalk extract of the fresh water crab *Potamon dehaani*. Annot. zool. jap. **28** 1955 : 86-91.

**Ozawa, T.** *see* Takesige, T., Unno, H. & Kudo, Y.

**Ozawa, T., Takesige, T., Kudo, Y. and Unno, H.** A study on the electrocardiogram of the cray-fish, *Cambarus clarkii*. Zool. Mag., Tokyo **64** 1955 : 178-181 4 figs.

**Palmer, A. R. and Bassett, A. M.** Non marine arthropods from California. Science **120** 1954 : 228-229 1 fig.

**Papi, E.** Experiments on the sense of time in *Talitrus saltator* (Montagu) (Crustacea-Amphipoda). Experientia **11** 5 1955 : 201-202 3 figs.

**Paproth, E. and Schmidt, W.** Ein *Anthrhopalaemon*-Lund aus sehr hohen Karbon. Paläont. Z. **29** 1-2 1955 : 83-87 text-figs. 1-2.

**Parameswaran, R.** Neurosecretory cells in *Paratelphusa hydrodromous* (Herbst). Curr. Sci. **24** 1 1955 : 23-24 2 figs.

**Parameswaran, R.** *see* Nayar, K. K. & Parameswaran, R.

**Pardi, L. and Grassi, M.** Experimental modification of direction-finding in *Talitrus saltator* (Montagu) and *Talorchestia deshayesi* (Aud.) (Crustacea, Amphipoda). Experientia **11** 5 1955 : 202-205 5 figs.

**Parenzan, P.** Speleobiologia delle Murge. Boll. Zool. **22** fasc. 2 1955 : 293-307.

**Parry, G.** Urine production by the antennal glands of *Palaemonetes varians* (Leach). J. exp. Biol. **32** 1955 : 408-422 1 fig.

**Pauli, V. L.** [Free-living Isopodes of Black Sea]. Trav. Sta. biol. Sebastopol **8** 1954 : 100-135 15 figs. [In Russian].

**Pauli, V. L. (1).** [Tanaidacea of the Black Sea]. Trav. Sta. biol. Sebastopol **8** 1954 : 136-146 5 figs. [In Russian].



**Penn, G. H.** A new *Cambarus* of the Diogenes section from North Louisiana. *Tulane Stud. Zool.* **3** 4 1955 : 73–81 13 figs.

**Pennak, R. W.** Persistent changes in the dominant species composition of limnetic entomostracan populations in a Colorado Mountain Lake. *Trans. Amer. micr. Soc.* **74** 1955 : 116–118.

**Pennak, R. W. (1).** Comparative limnology of eight Colorado mountain lakes. *Univ. Colo. Stud. Biol. No. 2* 1955 : 1–75 31 figs.

**Perner-Manegold, B.** Das Plankton des Dümmer in ökologischer Betrachtung mit Untersuchungen über die Temporalvariationen an *Bosmina longirostris*. *Abh. Landesmus. Westf.* **15** 1 1952 : 3–43 7 figs.

**Peters, H. M.** Die Winkgebärde von *Uca* und *Minuca* (Brachyura) in vergleichend—ethologischer, ökologischer und morphologisch-anatomischer Betrachtung. *Z. Morph. Ökol. Tiere* **43** 1955 : 425–500 51 figs.

**Petit, G. and Schachter, D.** La Camargue. Étude écologique et faunistique. *Année biol. (3)* **30** 5–6 1954 : 193–253.

**Petkovski, T. K.** Zweiter Beitrag zur Kenntnis der Harpacticidenfauna unserer Meeresküste. *Fragm. balcanica* **1** 15 1955 : 125–139 40 figs.

**Peus, F.** In memoriam Adolf Schellenberg. *Mitt. zool. Mus. Berl.* **31** 1955 : 3–10.

**Pflugfelder, O.** Abwehrreaktionen von *Crenilabous cinereus* v. cr. bei Befall durch *Anilocra mediterranea* Leach. *Z. Parasit.* **17** 1955 : 122–130.

**Phear, E. A.** Gut haems in the invertebrates. *Proc. zool. Soc. Lond.* **125** 1955 : 383–406 7 figs.

**Piette, E. F.** see Fischer-Piette, E.

**Pillai, N. K.** Pelagic Crustacea of Travancore. I. Decapod larvae. *Bull. Res. Inst. Univ. Travancore* **4C** 1 1955 : 47–101 23 figs.

**Pillai, N. K. (1).** Wood boring Crustacea of Travancore. I. Sphaeromidae. *Bull. Res. Inst. Univ. Travancore* **4C** 1 1955 : 127–139 2 pls.

**Plack, P. A.** see Fisher, L. R., Kon, S. K., Plack, P. A. & Thompson, S. Y.

**Pokorný, V. K.** taxonomii paleozoických skořepatců (ostracoda). (A contribution to the taxonomy of the Paleozoic Ostracods). *Sborn. geol. Úst. Čsl.* **20** 1953 : 213–232 text-figs. 1–6. [Czech, Russian & English].

**Pokorný, V. (1).** A contribution to the taxonomy of the paleozoic ostracods. *Sborn. Ústřed. Ustav. Geol. (paleont.)* **20** 1953 : 1–20. [Czech with Russian & English summaries].

**Polyanski, Y. I.** [Material to the parasitology of fish in the northern seas of USSR. Parasites of fish in Barents sea]. *Trav. Inst. zool. Acad. Sci. URSS.* **19** 1955 : 5–170 37 figs. [In Russian].

**Ponomareva, L. A.** [Importance of particular species of Euphasiids as food components of food of fishes and whales]. *Trud. Inst. Okeanol.* **8** 1954 : 200–205. [In Russian].

**Ponomareva, L. A. (1).** [On the seasonal changes in zooplankton of Laperouse Straits]. *Trud. Inst. Okeanol.* **11** 1954 : 258–263 4 figs. [In Russian].

**Ponomareva, L. A. (2).** [Euphasiids of Kurile–Kamchatka depression]. *Trud. Inst. Okeanol.* **12** 1955 : 288–297 6 figs. [In Russian].

**Ponyi, E.** Neue Cladocera-Formen aus Ungarn. *Zool. Anz.* **155** 1955 : 312–317 6 figs.

**Popovici, Z. and Angelescu, V.** La economía del Mar y sus relaciones con la alimentación de la humanidad. *Publ. Ext. cult. Mus. argent. Cienc. nat. No. 8* 1954 : 2 vols.

**Pozner, V. M.** [Stratigraphy of Terrigen layer of the lower Carboniferous of Kama–Kinel depression]. *C.R. Acad. Sci. URSS.* **104** 6 1955 : 892–894. [In Russian].

**Príbyl, A.** Skořepatci polského středního devonu (givetu) z profilu Grzegorzewice-Skały v horách Svato-křížských (The ostracods of the middle Devonian (Givetian) of Poland in the profile Grzegorzewice-Skały in the Góry Swietokrzyskie (St. Croix Mountains). *Sborn. geol. Úst. Čsl.* **20** 1953 : 233–344 pls. 25–32 text-figs. 1–4. [Czech, Russian & English].

**Prosser, C. L., Green, J. W. and Chow, J.** Ionic and osmotic concen-

trations in blood and urine of *Pachygrapsus crassipes* acclimated to different salinities. Biol. Bull. Woods Hole **109** 1955 : 99-107 1 fig.

**Prud'homme van Reine, W. J.** Plants and animals of the seashore. A handy guide containing drawings and descriptions of over 450 species of birds, shellfish, seaweeds, fish, etc. London (John Murray) 1955, pp. VI + 138 frontis. col. 34 pls.

**Pryor, C. W.** Further systematic serological studies of some Astacuran crustacea. Serological Mus. Bull. **8** 1952 p. 3-4.

**Puri, H. S.** Contribution to the study of the Miocene of the Florida Panhandle. Geol. Bull. Fla. geol. Surv. **36** 1953 : 215-309 pls. 1-17 text-figs. 1-13.

**Puri, H. S. (1).** *Hermanites*, new name for *Hermania* Puri 1954. J. Paleont. **29** 1955 : 658.

**Puscariu, V.** see Dobreanu, E., Manolache, C. & Puscariu, V.

**Pyatak, M. L.** [Incretory system in Cladocera]. Zool. Zh. **34** 6 1955 : 1439-1440. [In Russian].

**Qasim, S. Z.** see Knight Jones, E. W. & Qasim, S. Z.

**Racek, A. A.** Littoral Penaeinae from New South Wales and adjacent Queensland waters. Aust. J. Mar. Freshw. Res. **6** 1955 : 209-241 9 pls.

**Radu, V. G.** Particularitati ale structurii stomacului la *Mesoniscus alpicolus*. Bul. sti. Acad. Repub. rom. Ser. Geol. **L. 2** 1 1950 : 25-33 10 figs.

**Radu, V. G. (1).** Revizuire critica a speciei de isopod cavernicol : *Mesoniscus alpicolus vulgaris* (Chappuis, 1944). Bul. sti. Acad. Repub. rom. Ser. Geol. **L. 2** 3 1950 : 159-165 1 fig. [French résumé].

**Radu, V. G. and V. V. and Cădariu, M. I.** *Haplophthalmus caecus*, une espèce nouvelle d'isopode terrestre de la fauna de la République Populaire Roumaine. Bul. sti. Acad. Repub. rom. Sect. Biol., **L. 7** 3 1955 : 803-815 5 figs. [French résumé].

**Ragotskü, R. A. and Bryson, A.** Correlation of currents with the distribution of adult *Daphnia* in Lake Mendota. J. mar. Res. **12** 1953 : 157-172 12 figs. [Not seen].

**Rahm, U.** Verbreitung und Biologie von *Acartia clausi gaboonensis* (Scott) in der Laguna Ebrié (Elfenbeinküste). Verh. schweiz. naturf. Ges. **135** 1955 : 155-158 map.

**Rangnekar, M. P.** *Pseudocaligus laminatus* sp. nov. and *Diphylllogaster aliuncus* sp. nov. (Copepoda), parasitic on Bombay fishes. J. Univ. Bombay N.S. **23B** 5 1955 : 44-52 28 figs.

**Rangnekar, P. V.** A comparative study of the blood plasma of some crustaceans and molluscs. J. Anim. Morph. Physiol. **1** No. 2 1955 : 42-47.

**Rangnekar, P. V. (1).** A comparative study of the bloods of some crustaceans, molluscs and vertebrates with reference to their constituent amino-acids. J. Anim. Morph. Physiol. **1** No. 2 1955 : 55-57.

**Rangnekar, P. V. (2).** The nutritive capacity of the blood of some representative crustaceans and molluscs. J. Anim. Morph. Physiol. **2** 1955 : 101-104.

**Ravera, O.** Seasonal variation of the reproduction rate in pelagic copepods of Lake Maggiore. Verh. int. Ver. Limnol. **12** 1955 : 436-446 5 figs.

**Raw, F.** The Malacostraca : their origin, relationships, and phylogeny. Ann. Mag. nat. Hist. (12) **8** 1955 : 731-756 5 figs.

**Rees, C. B.** Continuous plankton records : The decapod larvae in the North Sea 1950-51. Bull. Mar. Ecol. **4** 29 1955 : 69-80 2 pls. 5 figs.

**Reggiani, M. P.** Osservazioni sugli ovociti e le cellule nutrici bel Cladocero *Simocephalus vetulus* (O. F. Muller). Boll. Zool. **21** 1954 : 453-460 1 pl.

**Řeháčková, V.** Well-water organisms of Prague. Rozpr. české Akad. **63** 5 1953 : 1-35 6 figs. map. [English summary].

**Řeháčková, V.** see Sládeček, V. & Řeháčková, V.

**Reichenbach-Klinke, H.-H.** Erstmalige Einschleppung einer amerikanischen *Livoneca*-Art nach Europa. Zool. Anz. **154** 1955 : 318-320 2 figs.

**Reine** see Prud'homme van Reine, W. J.

**Reinhard, E. G.** Parasitic castration of Crustacea. *Exper. Parasit.* **5** 1 1955 : 79-107.

**Remmert, H.** *see* Ohm, P. & Remmert, H.

**Remy, J. M.** *Pagurus bathonicus* nov. sp. et *Graptocarcinus texanus* Roemer. Crustacés décapodes du secondaire de la France. *Bull. Mus. Hist. nat. Paris* (2) **27** 1955 : 160-164 4 figs.

**Reuben, N.** *see* George, C. J., Reuben, N. & Muthe, P. T.

**Reynier, M.** *see* Veillet, A. & Reynier, M.

**Richardson, E. S.** A new variety of cretaceous decapod from Texas. *Fieldiana, Zool.* **37** 1955 : 445-448 1 fig.

**Ringuelet, R. A.** Vinculaciones faunísticas de la zona boscosa nel Nahuel Huapi y el dominio zoogeografico Austral cordillerano. *Notas Mus. Eva Perón* **18** 1955 : 81-121.

**Rioja, E.** Estudios carcinológicos, XXXII. Primeros datos Acerca de las especies del Genero *Entocythere* (Crustaceas Ostracodos) de la Isla de Cuba. *An. Inst. Biol. Mex.* **26** 1 1955 : 193-197 1 fig.

**Rioja, E. (1).** Estudios carcinológicos, XXXIV. Dos nuevos isopodes cavernícolas de la Sierra Madre Oriental (Region de Xilitla), Mexico. *An. Inst. Biol. Mex.* **26** 2 1955 : 447-457 3 pls.

**Rioja, E. (2).** Estudios carcinológicos XXXIII. Observaciones acerca de dos nuevas especies Isopodos cavernícolas de Chiapas. *An. Inst. Biol. Mex.* **26** 1 1955 : 199-209 3 figs.

**Roback, S. S.** *see* Wurtz, C. B. & Roback, S. S.

**Robertson, J. D.** Recent electron microscope observations on the ultrastructure of the crayfish median-to-motor giant synapse. *Exp. Cell Res.* **8** 1955 : 226-229 6 figs. [Not seen].

**Roch, G. F.** Die holz- und steinzerstörenden Tiere der Afrikanischen Küstengewässer. *Riv. Biol. colon.* **13** 1955 : 71-91.

**Rodhe, W.** Can plankton production proceed during winter darkness in subarctic lakes? *Verh. int. Ver. Limnol.* **12** 1955 : 117-122.

**Roe, K. M.** Genus *Paraphyllopodosyllus* Lang (Copepoda Harp.). *Proc. roy. Irish Acad.* **57B** 9 1955 : 131-139 31 figs.

**Røen, U.** On the number of eggs in some free-living freshwater copepods. *Verh. int. Ver. Limnol.* **12** 1955 : 447-454 5 figs.

**Romanova, M. A.** *see* Vistelius, A. B., Korobkov, I. A., Romanova, M. A. & Semenovich, V. N.

**Romanovský, A.** Beitrag zur Kenntnis parasitischer Copepoden in Slowakei. *Biologická, Bratislava* **10** 2 1955 : 227-231. [German summary]. [Not seen].

**Romanovský, A. (1).** The found [sic.] of *Ergasilus briani* Markewitsch 1932 in Czechoslovakia. *Mem. Soc. zool. tcheosl.* **19** 1955 : 187-189 5 figs.

**Rome, R.** L'étude des ostracodes actuels du Congo Belge. *Ann. Mus. Congo Tervuren in-4°.* *Zool.* **1** 1954 : 269-273.

**Roth-Woltereck, E.** Vorläufige Mitteilung über eine neue Hohlengarneele (Decapoda Atyidae) aus Belgisch Kongo. *Rev. Zool. Bot. afr.* **51** 1955 : 197-207.

**Ruffo, S.** Etudes sur les Crustacés Amphipodes. XLIII. Une nouvelle espèce de *Photis* de Madagascar (Amphipodes Photidae). *Nat. malgache* **7** 2 1955 : 195-200 2 figs.

**Ruggieri, G.** Correzione ad alcuni lavori su ostracodi dell'autore stesso. *Giorn. Geol. Bologna* (2) **23** 1953 : 1-2.

**Ruggieri, G. (1).** *Tyrrhenocythere*, a new recent ostracode genus from the Mediterranean. *J. Paleont.* **29** 1955 : 698-699 5 figs.

**Rühmer, K.** Die Süßwasserfische und Krebse etc. Eberhausen bei München (Fischerei Verlag) 1952 pp. 203 illust. (col.).

**Ruting, J. and Stock, J. H.** Zeldzame visparasiet int Amsterdamse stadsgracht. *Natura, Amst.* **52** 7 1955 : 84-86 2 figs.

**Ryen, see** Soot-Ryen, T.

**Ryther, J. H.** Inhibitory effects of phytoplankton upon the feeding of *Daphnia magna* with reference to growth, reproduction, and survival. *Ecology* **35** 1954 : 522-533 5 figs.



- Saint-Seine**, R. de. Existence de Cirripèdes acrothoraciques dè le Lias : *Zaphella pattei* nov. gen., nov. sp. Bull. Soc. géol. Fr. 6 4 4-6 1954 : 447-451 pls. 18-20.
- Sakai**, T. Preliminary report on the brachyuran Crustacea of Hachijo Island. Rec. Oceanogr. Wks. Jap. N.S. 1 2 1953 : 73-77.
- Sakai**, T. (1). Further notes on the brachyura Crustacea of the Hachijo Island. Rec. oceanogr. Wks. Japan 2 1 1955 : 193-201 2 figs.
- Sandeén**, M. I. *see* Brown, F. A. & others.
- Sanders**, H. L. The Cephalocarida, a new Sub-class of Crustacea from Long Island Sound. Proc. nat. Acad. Sci. 41 1955 : 61-66 figs.
- Santler**, J. E. *see* Chapman, G. & Santler, J. E.
- Savory**, T. H. The world of small animals, London (University of London Press), 1955, pp. 160 17 pls. 30 figs.
- Sawyer**, F. C. Books of reference in zoology, chiefly bibliographical. J. Soc. Bibl. nat. Hist. 3 1955 : 72-91.
- Schachter**, D. *see* Petit, G. & Schachter, D.
- Scheer**, B. T. and M. A. R. Relation of colour changes to moulting in prawns. Nature, Lond. 175 1955 : 473-474.
- Schellenberg**, A. Amphipoda. Rep. Sw. Deep-Sea Exped. 2 2 1955 : 181-195 4 figs.
- Schmidt**, G. Stratigraphie und Mikofauna des mittleren Malm in nordwest-deutschen Bergland mit einer Kartierung am Südlichen Ith. Abh. Senckenb. naturf. Ges. No. 491 1955 : 1-76 9 pls.
- Schmidt**, W. *see* Paproth, G. & Schmidt, W.
- Schmölzer**, K. *Asellus aquaticus arthrobranchialis* Dud. im Lago Maggiore. Zool. Anz. 154 1955 : 85-89 4 figs.
- Schwaerbel**, J. Untersuchungen zur Ökologie einiger niederrheinischer Cyclopiden aus Kleingewässern. Arch. Hydrobiol. 50 1955 : 82-91.
- Schwartzkopff**, J. Die Grössen abhängigkeit der Herzfrequenz von Krebsen im Vergleich zu anderen Tiergruppen. Experientia 11 8 1955 : 323-325.
- Schwartzkopff**, J. Vergleichende Untersuchungen der Herzfrequenz bei Krebsen. Biol. Abl. 74 1955 : 480-497 5 figs.
- Sdzuy**, K. Die Fauna der Leimitz-Schiefer (Tremadoc). Abh. senckenb. naturf. Ges. No. 492 1955 : 1-73 8 pls. 48 figs.
- Sebestyén**, O. Quantitative plankton studies on Lake Balaton. V. Biomass calculations on open water crustaceans. An. Inst. Biol. Tihany 23 1955 : 75-94 1 pl. 24 figs. [English summary].
- Segerstråle**, S. G. The freshwater amphipods, *Gammarus pulex* and *Gammarus lacustris*, in Scandinavia and Finland—a contribution to the late and post-glacial immigration history of the fauna of northern Europe. Verh. int. Ver. Limnol. 12 1955 : 629-631.
- Segrove**, F. *see* Colman, J. S. & Segrove, F.
- Semenovich**, V. N. *see* Vistelius, A. B., Korobkov, I. A., Romanova, M. A. & Semenovich, V. N.
- Semikhatova**, S. V. and **Menyailenko**, P. A. [Lithological and Paleontological characteristic of the deposits, bordering between the Devonian and Carboniferous in the southern part of Dono-Medveditz elevation]. C.R. Acad. Sci. URSS 102 4 1955 : 805-808 fig. [In Russian].
- Serban**, M. *see* Bănărescu, P. & Serban, M.
- Serene**, R. Sur quelques especes rares de Brachyures (Leucosidae) de l'Indo-Pacifique. Treubia 23 1955 : 137-218 6 pls. 11 figs.
- Seréne**, R. *see* Fize, A. & Seréne, R.
- Sewell**, M. T. Lipo-protein cells in the blood of *Carcinus maenas*, and their cycle of activity correlated with the moult. Quart. J. micr. Sci. 96 1955 : 73-83 5 figs.
- Shaw**, J. Ionic regulation in the muscle fibres of *Carcinus maenas*. I. The electrolyte composition of single fibres. J. exp. Biol. 32 1955 : 383-396 1 fig.

**Shaw, J. (1).** Ionic regulation in the muscle of *Carcinus maenas*. II. The effect of reduced blood concentration. J. exp. Biol. **32** 1955 : 664-680 7 figs.

**Shcherbakov, A. P.** [Dynamics of the biomass of some representatives of microbenthos in the deep lake]. Trud. Vsesoyuz. Gidrobiol. Obshch. **6** 1955 : 122-132. [In Russian].

**Shcherbakov, A. P. (2).** [New data on photo- and geotaxis in lower Crustaceans]. Adv. mod. Biol. Moscow **40**:1 (4) 1955 : 88-93 fig. [In Russian].

**Shen, C. J.** On some marine crustaceans from the coastal water of Fenghsien, Kiangsu Province. Acta. Zool. Sinica **7** 1955 : 75-100 62 figs. [Chinese and English].

**Shiino, S. M.** On the new copepod, *Caligus calotomi* n. sp. parasitic on the fish, *Calotomus japonicus* (C. & V.). Bull. Jap. Soc. sci. Fish. **20** 1954 : 16-20 2 figs.

**Shiino, S. M. (1).** Note on *Caligus quadratus* n. sp. a copepod parasitic on the fish, *Neothynnus macropterus* (T. & S.). Bull. Jap. Soc. sci. Fish. **20** 1954 : 26-27 1 fig.

**Shiino, S. M. (2).** On *Caligus latigenitalis* n. sp. a copepod parasitic on the fish, *Sparus macrocephalus* (Basilewsky). Bull. Jap. Soc. sci. Fish. **20** 1954 : 27-29 1 text fig.

**Shiino, S. M. (3).** On the parasitic copepod *Lepeophtheirus lostanabei* n. sp. found on the fish *Myxoxcephalus raninus* J. & S. Bull. Soc. Jap. sci. Fish. **20** 1954 : 96-100 1 fig.

**Shiino, S. M. (4).** Note on a new parasitic copepod *Caligus brevis* n. sp. Bull. Jap. Soc. sci. Fish. **20** 1954 : 178-183 2 figs.

**Shiino, S. M. (5).** Record of *Caligus dieuzeidei* Brian newly found in Japan. Bull. Jap. Soc. sci. Fish. **20** 1954 : 268-272 2 text figs.

**Shiino, S. M. (6).** On the male of *Caligus cordiventris* Shiino. Zool. Mag., Tokyo **64** 1955 : 65-67 1 fig. [Japanese with English summary].

**Shiino, S. M. (7).** *Alicalgus tripartitus* gen. et sp. nov. A caligid copepod found on the gills of *Sarda orientalis* (T. & S.). Pacific Sci. **9** 1955 : 56-61 2 text figs.

**Shiino, S. M. (8).** *Alebion echinatus* Capart, from Japanese waters, with observations on the newly found male form. Pacific Sci. **9** 1955 : 177-182 3 text-figs.

**Shiino, S. M. (9).** *Paranesippus incisus* n. gen., n. sp. a new parasitic Copepod of the family Pandaridae. Pacific Sci. **9** 1955 : 349-353.

**Shiino, S. M. (10).** Copepods parasitic on Japanese fishes. 2. On two new species of the family Trebidae. Rep. Fac. Fish. Univ. Mie **1** 1954 : 247-259 4 text figs.

**Shiino, S. M. (11).** Copepods parasitic on Japanese fishes. 3. On two new species of the genus *Anuretes*. Rep. Fac. Fish. Univ. Mie. **1** 1954 : 260-272 5 text figs.

**Shiino, S. M. (12).** Copepods parasitic on Japanese fishes. 4. The family Euryphoridae. Rep. Fac. Fish. Univ. Mie **1** 1954 : 273-290 text figs. 1-6.

**Shiino, S. M. (13).** Copepods parasitic on Japanese fishes. 5. Five species of the family Pandaridae. Rep. Fac. Fish. Univ. Mie **1** 1954 : 291-332 19 text figs.

**Shiino, S. M. (14).** Copepods parasitic on Japanese fishes. 6. Two species of the family Cecropidae. Rep. Fac. Fish. Univ. Mie **1** 1954 : 333-345 6 text figs.

**Shiino, S. M. (15).** Copepods parasitic on Japanese fishes. 8. The Anthosomidae. Rep. Fac. Fish. Univ. Mie **2** 1955 : 50-69 figs.

**Shiino, S. M. (16).** Copepods parasitic on Japanese fishes. 9. Family Chondracanthidae. Sub-family Chondracanthinae Rep. Fac. Fish. Univ. Mie **2** 1955 : 70-111 figs.

**Shiino, S. M. (17).** A new fresh water Entoniscid Isopod, *Entionella okayamaensis* n. sp. Rep. Fac. Fish. Univ. Mie **1** 1954 : 239-246 text- 1-4.

**Shiino, S. M. (18).** Some Bopyrid parasites found on the Decapod Crustaceans from the waters along Mie Prefecture. Rep. Fac. Fish. Pref. Univ. Mie 1951 **1** 1 pp. 26-40 figs.

**Shiino, S. M. (19).** Note on some new Bopyrids from Japan. J. Mie Med. College 1950 **1** 2 : 151-167 figs.

**Shiino, S. M. (20).** Phylogeny of the family Bopyridae. Ann. Rep. Pref. Univ. Mie **1** 1952 : 33-56.

**Shiino, S. M. (21).** On two new species of the Bopyrid genus *Bopyrella*, found in Japan. Bull. biogeogr. Soc. Japan. **14** 9 1949 : figs.

**Shiino, S. M. (22).** On two new genera of Bopyridae found in Japan. Bull. biogeogr. Soc. Japan **14** 11 1949 : 57-63 figs. [Omitted from Z.R.].

**Shiino, S. M. (23).** On two new Bopyrid parasites belonging to the genus *Orbione*. Bull. biogeogr. Soc. Japan **14** 1949 : 51-55 figs.

**Shiino, S. M. (24).** Studies on marine wood-boring Crustaceans. I. On two species of *Limnoria*. Misc. Rep. Res. Inst. Nat. Res. **6** 1944 : 1-20 figs. [In Japanese].

**Shiino, S. M. (25).** Studies on marine wood-boring Crustaceans. II. On four species of the Sphaerominae Hemibranchiatae. Misc. Rep. Res. Inst. Nat. Res. **7** 1944 : 1-20 figs.

**Shiino, S. M. (26).** Studies on marine wood-boring Crustaceans. III. On a new boring Amphipod, *Chelura brevicauda* sp. n. Misc. Rep. Res. Inst. Nat. Res. **12** 1948 : 25-28 figs.

**Shikama, T.** On the Tertiary formations of Tomikusa in South Nagano Prefecture. Sci. Rep. Yokohama Univ. Sect. II No. 3 1954 : 71-108 5 pls.

**Shimoizumi, M.** The breeding habits of *Metoponorthus pruinosis* Brandt. J. Gakugei Coll. Tokushima Univ. Nat. Sci. **2** 1952 : 31-35. [Not seen].

**Shneider, G. F.** [Stratigraphical importance of Ostracods in coal bearing deposits of the Southern Timan. C.R. Acad. Sci. URSS. **108** 5 : 931-932. [In Russian].

**Shoemaker, C. R.** Amphipoda collected at the Arctic Laboratory, Office of Naval Research, Point Barrow, Alaska by G. E. MacGintie. Smithsonian. misc. Coll. **128** 1 1955 : 1-78 20 figs.

**Shoemaker, C. R. (1).** Notes on the amphipod crustacean *Maeroides thompsoni* Walker. J. Wash. Acad. Sci. **45** 1955 : 59.

**Shulman, S. S. and Shulman-Albova, R. E.** [Parasites of fishes of

the White Sea]. Moscow 1953 pp. 200 22 figs. [In Russian].

**Shulman-Albova, R. E.** see Shulman, S. S. & Shulman-Albova, R. E.

**Siewing, R.** Über die Verwandtschaftsbeziehungen der Anaspidaceen. Verh. dtsh. zool. Ges. **1954** 1955 : 240-252 11 figs.

**Siewing, R.** see Delamare-Deboutteville, C., Gerlach, S. & Siewing, R.

**Sládeček, V.** Naše nej běž nější perloočky. Akvarist. listy **22** 1950 : 63-69.

**Sládeček, V. (1).** Zooplankton Máchova jezera, břehynského a novozámeckeno rybníka. Časop. Narod. Mus. odd. přírod. **120** 1951 : 29-84.

**Sládeček, V. (2).** Zooplankton jezírka v propaste Macuška. Časop. Narod. Mus. odd. přírod. **122** 1954 : 220.

**Sládeček, V. (3).** Rozbor planktonu Pastvinské přehady—analysis of the plancton of the water-basin at Pastviny. Českosl. rybar. **4** 1949 : 126. [Czech. only].

**Sládeček, V. and Řeháčková, V.** Buchanky Pražských studní. Čas. narod. Mus. odd. přírod. **120** 1952 : 118-125. [Czech with Russian & French summaries].

**Sládeček, V.** see Oliva, O. & Sládeček, V.

**Slobodkin, L. B.** Population dynamics in *Daphnia obtusa* Kurz. Ecol. Monogr. **24** 1954 : 69-88 27 figs.

**Smyly, W. J. P.** Seasonal variation in length of furcal rami in the subgenus *Eucyclops*. Ann. Mag. nat. Hist. (12) **8** 1955 : 636-638.

**Smyly, W. J. P. (1).** A "minnehaha" form of *Daphnia longispina* O. F. Müller. J. Quckett micr. Cl. (4) **4** 1955 : 217-218 figs.

**Smyly, W. J. P. (2).** Comparison of the Entomostraca of two artificial moorland ponds near Windermere. Verh. int. Ver. Limnol. **12** 1955 : 421-424.

**Sohn, I. G.** Paleocene Ostracoda from outcrops in Maryland. Science **119** 1954 : 656.



**Soika, A. G.** Éthologie, écologie, systématique et biogéographie des *Eurydice* s. str. (Isop., Cirolanides). *Vie et Milieu* **6** 1955 : 38-52 7 figs.

**Solima, A.** see Tadini, G. V. & Solima, A.

**Sollaud, E.** Quelques observations faites en 1954 sur la faune de la région de Dinard. *Bull. Lab. marit. Dinard* No. 41 1955 : 34-35.

**Sommani, E.** Il lago Lungo. Caratteristiche idrobiologiche di un ambiente salmastro. Osservazioni generali e biologiche. *Boll. Pesca Piscic. Idrobiol.* **30** 1955 : 30-53 2 pls. 3 figs.

**Soot-Ryen, T.** *Calocaris macandreae* Bell (Crustacea Decapoda) in North-Norway. *Astarte* **10** 1955 : 1-3.

**Southward, A. J.** Feeding of barnacles. *Nature, Lond.* **175** 1955 : 1124-1125.

**Southward, A. J. (1).** On the behaviour of barnacles. I. The relation of cirral and other activities to temperature. II. The influence of habitat and tide-level on cirral activity. *J. Mar. biol. Ass. U.K.* **34** 1955 : 403-433 6 figs.

**Spencer, J. O.** see Edney, E. B. & Spencer, J. O.

**Spoor, W. A.** Loss and gain of heat-tolerance by the crayfish. *Biol. Bull. Woods Hole* **108** 1955 : 77-87 2 figs.

**Srinivasan, T. K.** Crustaceans in relation to underwater timber structures. *Curr. Sci.* **24** 10 1955 : 342.

**Staiger, H. and Bocquet, C. (1).** Cytological demonstration of female heterogamety in isopods. *Experientia* **10** 2 1954 : 64-66 5 figs.

**Stchipsky, A.** Etude des Ostracodes du Crétacé inférieur de la Haute-Marne. *Bull. Soc. géol. Fr.* **6** 4 7-9 1954 : 485-500 pl. 22 text-figs. 1-5 1 table.

**Stefanenko, A. Y. and Makhnach, A. S.** [Stratigraphy of the Devonian deposits and the age of the salt-bearing layer of the Pripet bend]. *J. Acad. Sci. Beloruss. Repub.* **2** 1955 : 87-100. [In Russian].

**Stella, E.** Expedizione subacquea Italiana nel Mar Rosso, Ricerche zoologiche. Parte III. Crostacei decapodi

e stomatopodi. *Riv. Biol. colon.* **13** 1955 : 51-70 1 fig.

**Stella, E. (1).** Behaviour and development of *Monodella argentarii* Stella a Thermosbenacean from an Italian cave. *Verh. int. Ver. Limnol.* **12** 1955 : 464-466.

**Stephens, G. C.** Induction of molting in the crayfish, *Cambarus* by modification of daily photoperiod. *Biol. Bull. Woods Hole* **108** 1955 : 235-241.

**Stephenson, E. M. and Stewart, C.** Animal camouflage, London (Adam & Charles Black) 1955, pp. x + 195 frontis. 14 pls.

**Stephenson, W. and McNeill, F.** The Australian Stomatopoda (Crustacea) in the collections of the Australian Museum, with a check list and key to the known Australian species. *Rec. Aust. Mus.* **23** 1955 : 239-265 1 fig.

**Štěrba, O.** Copepodes of the brooks in the rear of the dam Bystřička. *Přírod. Sborn. Ostravsk. Kraje* **16** 1 1955 : 51-55. figs. [Czech with Russian & English summaries].

**Stevens, B. A.** see Walton, B. C. & Stevens, B. A.

**Stewart, C.** see Stephenson, E. M. & Stewart, C.

**Stock, J. H. (1).** A new *Bomolochus* (Copepoda parasitica) from the California Grunion. *Beaufortia* **5** 1955 : 55-59 24 figs.

**Stock, J. H.** see Ruting & Stock, J. H.

**Stolyarov, V. P.** [Parasitic fauna of fishes in Ribinsk water-reservoir]. *Trud. Leningrad Soc. Nat.* **71** 4 1952 : 261-285. [In Russian].

**Strouhal, H.** Zoologische Studien in West Griechenland. IV. Teil. Isopoda terrestria. I. Ligiidae, Trichoniscidae, Oniscidae, Porcellionidae, Squamiferidae. *S.B. öst. Akad. Wiss. Abt. I* **163** 1955 : 559-601 52 figs.

**Strouhal, H.** see Franz, H. & Strouhal, H.

**Suchcitz-Malaczynska, see Malaczynska-Suchcitz, Z.**

**Sueur, Le R. F.** Marine Zoological Report for 1954. *Bull. Soc. Jersiaise* 1955 XVI III : 263-267.

**Sueur, Le R. F. (1).** Anatomical notes on the male of *Eocuma dollfusii* Calman (Cumacea) obtained from St. Aubin's Bay, Jersey. Bull. Soc. Jersiaise 1955 XVI III : 319-322.

**Suko, T.** Studies on the development of the crayfish. III. Sci. Rep. Saitama Univ. **2B** 1 1955 : 39-44 2 pls.

**Swaby, L. G.** *see* Lauffer, M. A. and Swaby, L. G.

**Sweeney, H. M.** *see* McWhinnie, M. A. & Sweeney, H. M.

**Sylvester-Bradley, P. C. and Harding, J. P.** Postscript notes of the ostracode *Trachyleberis*. J. Paleont. **28** 5 1954 : 560-562.

**Szidat, L.** La fauna de parasitos de *Merluccius hubbsi*. Comun. Inst. nac. B. Rivadavia. Zool. **3** 1955 : 1-54 37 figs.

**Tadini, G. V. and Solima, A.** Cellule follicolari in relazione con la spermatogenesi in *Armadillidium depressum*. Boll. Zool. **22** 1955 : 17-42 1 pl.

**Tadini-Vitagliano** *see* Vitagliano-Tadini, G.

**Takesige, T.** *see* Ozawa, T., Unno, H. & Kudo, Y.

**Tanaka, O.** A new species of copepod, *Scolecithricella vespertina*, n. sp. from the Sea of Japan. Rec. oceanogr. Wks. Japan **2** 1 1955 : 117-120 4 figs.

**Tarasov, N. T.** *see* Zevina, G. B. & Taresov, N. T.

**Tasch, P.** Correction : Triopsidae Keilhack, 1910, not Tchernyshev, 1940. J. Paleont. **29** 6 1955 : 1070.

**Tattersall, O. S.** Mysidacea. 'Discovery' Rep. **28** 1955 : 1-190 46 figs.

**Taylor, A. E. R.** *see* Fox, H. M. & Taylor, A. E. R.

**Telford, S. R., Lewis, W. H. and Kayan, J. B.** A preliminary report on observations of the effects of eye-extirpation on testicular behavior in the Crayfish. Virginia J. Sci. N.S. **6** 4 1955 : 248.

**Thomas, H. J.** Observations on the sex ratio and mortality rates in the lobster *Homarus vulgaris* Edw. J. Cons. int. Explor. Mer. **20** 1955 : 295-305. [Not seen].

**Thomas, H. J. (1).** Observations on the recaptures of tagged lobsters in Scotland. Mar. Res. **1955** No. 2 : 1-12 7 figs.

**Thomas, H. J. (2).** Some observations on the distribution biology and exploitation of the Norway lobster (*Nephrops norvegicus* L.) in Scottish waters. Mar. Res. **1954** No. 1 : 1-12 3 figs.

**Thomasson, K.** Studies on South American fresh-water plankton. 3. Plankton from Tierra del Fuego and Valdivia. Acta. Horti Gotoborg. **19** 1955 : 193-225 figs.

**Thompson, S. Y.** *see* Fisher, L. R. & Kon, S. K.

**Thompson, S. Y.** *see* Fisher, L. R., Kon, S. K., Plack, P. A. & Thompson, S. Y.

**Ticehurst, N. F.** Notes on the local fauna and flora for 1955. Hastings Nat. **8** 1955 : 169-189.

**Tiwari, K. K.** Sex ratio and variability of apodous segments in *Apus* (Phyllopoda : Crustacea). J. Bombay nat. Hist. Soc. **52** 1954 : 641-644.

**Tomíć-Džodžo, R.** Microfauna from well-drilling CE 1—Šumecani. Zborn. Radova geol. Inst. Beograd **7** 1954 : 201-227 pls. 1-4 English summary p. 226.

**Tomlinson, J. T.** The morphology of an Acrothoracican barnacle, *Trypetesa lateralis*. J. Morph. **96** 1955 : 97-121 20 figs.

**Tonolli, V.** Predazione e selezione in popolamenti a Copepodi di acque alpine. Boll. Zool. **21** 1954 : 541-545.

**Tonolli, V. (1).** The migration currents of microplankton organisms carried by lacustrine outflow waters. Verh. int. Ver. Limnol. **12** 1955 : 412-420 2 figs.

**Travis, D. F.** The molting cycle of the spiny lobster, *Panulirus argus* Latreille. II. Pre-ecdysial histological and histochemical changes in the hepatopancreas and integumental tissues. Biol. Bull. Woods Hole **108** 1955 : 88-112 34 figs.

**Travis, D. F. (2).** The molting cycle of the spiny lobster, *Panulirus argus* Latreille. III. Physiological changes which occur in the blood and

urine during the normal molting cycle. Biol. Bull. Woods Hole **109** 1955 : 484-503 8 figs.

**Triebel, E.** Malm-Ostracoden mit amphidontem Schloss. Senckenbergiana Lethaea. **35** 1954 : 3-16 4 pls.

**Triebel, E. (1).** *Loxoconchella* n.g. (Crust., Ostr.). Senckenbergiana. Lethaea. **35** 1954 : 17-21 2 pls.

**Tuaev, N. P.** [Lower Cretaceous of adjacent Dzhungaria]. C.R. Acad. Sci. URSS. **100** 2 1955 : 351-354. [In Russian].

**Tweedie, M. W. F.** Notes on Grapsoid crabs from the Raffles Museum, Nos. 3, 4 and 5. Bull. Raffles Mus. No. 25 1955 : 118-128 2 figs.

**Uéno, M.** Cladocera of the Yangtze Delta (Reports on the limnological survey of China). Shanghai Sizenkag. Ken. Iho. **14** 1944 : 399-418 figs. [Japanese with English summary].

**Uéno, M. (1).** Cladocera and Copepoda of the Ozegahara Moor. Scient. Res. Ozegahara Moor 1954 : 684-689 10 figs. [Japanese with English summary].

**Uéno, M. (2).** Zooplankton of the Ozegahara Moor waters. Scient. Res. Ozegahara Moor 1954 : 690-701. [Japanese with English summary].

**Unno, H.** see Ozawa, T., Takesige, T. & Kudo, Y.

**Utinomi, H.** Studies on the Cirripedia of Japan. II. Geographical distribution. Bull. biogeogr. Soc. Japan **16-19** 1955 : 113-123. [In Japanese].

**Utinomi, H. (1).** Studies on the Cirripedia of Japan. III. Ecological evidences. Bull. biogeogr. Soc. Japan **16-19** 1955 : 124-134. [Japanese with English summary of parts I, II & III].

**Utinomi, H. (2).** Invertebrate fauna of the intertidal zone of the Tokara Islands. IX. Cirripedia. Publ. Seto Mar. biol. Lab. **4** 1954 : 17-26 2 figs.

**Vaissière, R.** L'innervation des cellules rétinienues de l'oeil du copépode pontellide *Anomalocera patersoni* Templeton. C.R. Acad. Sci. Paris **240** 1955 : 345-347 1 fig.

**Vaissière, R. (1).** Description d'un nouveau copépode parasite : *Caligus uranoscopi*. Bull. Sta. Aquic. Pêche Castiglione (N.S.) **7** 1955 : 281-288 1 fig.

**Valente, D. and Edwards, G. A.** The regulation of the activity rhythm of the crab (*Trichodactylus petropolitanus*). Bol. Fac. Fil. Cienc. S. Paulo (Zool.) **20** 1955 : 5-12 5 graphs.

**Vandel, A.** Isopodes terrestres récoltes dans les grottes de L'Attique par M. Pierre Strinati. Notes Biospéologiques **10** 1955 : 52-61 figs. 1-6.

**Vandel, A. (1).** La faune isopodique cavernicole de l'Afrique du nord (Berbérie). Notes Biospéologiques **10** 1955 : 64-80 6 figs.

**Vandel, A. (2).** Description de deux nouvelles espèces cavernicoles de *Trichoniscus* appartenant au groupe *Pygmaeus*. Notes Biospéologiques **10** 1955 : 46-49 2 figs.

**Vandel, A. (3).** Mission Henri Coiffait au Liban en 1951.—Isopodes terrestres. Arch. Zool. exp. gén. **91** 1955 : 455 531.

**Vandel, A. (4).** Sur le statut systématique de *Porcellio succinctus* B.-L. Bull. Mus. Hist. nat. Paris (2) **27** 1955 : 71-76 2 figs.

**Vandel, A. (5).** L'évolution considérée comme phénomène de développement. Bull. Soc. zool. Fr. **79** 1955 : 341-356 10 figs.

**Varentzov, I. M.** [On the composition and the distribution of the genus of bivalve Phyllopods *Palaeolimnadiopsis* in Palaeozoicum]. C.R. Acad. Sci. URSS. **104** 2 1955 : 310-312 3 figs. (pl.). [In Russian].

**Varentzov, I. M. (1).** To the stratigraphy of the mid-Devonian deposits of Tuva. C.R. Acad. Sci. URSS. **104** 3 1955 : 459-461. [In Russian].

**Veiga Ferreira, O. da.** Malacostráceos do Miocénico marinho de Portugal. Comun. Serv. geol. Portug. **35** 1954 : 57-78 pls. 1-6 text-figs. 1-12 1 table.

**Veillet, A.** Remarque sur l'influence de la sacculine sur les organes endocrines des crabes. Bull. Soc. Sci. Nancy N.S. **14** 3 1955 : 73-74.

**Veillet, A., Balesdent-Marquet, M.-L., Lenel, R. and Vernet-**



**Cornubert, G.** Remarque sur le mécanisme hormonal de la mue chez les crustacés décapodes. *Bull. Soc. Sci. Nancy N.S.* **14** 2 1955 : 70-71.

**Veillet, A. and Reynier, M.** Notes sur les rapports entre les mue et la porte chez les crustacés. *C.R. Ass. franç. Av. Sci.* **72** 1953 : 486.

**Vernet-Cornubert, G. and De-meusy, N.** Influence de l'ablation des pédoncules oculaires sur les caractères sexuels externes des femelles pubères de *Carcinus maenas* et de *Pachygrapsus marmoratus*. *C.R. Acad. Sci. Paris* **240** 1955 : 360-361.

**Vernet-Cornubert, G.** *see* Veillet, A., Balesdent-Marquet, M.-L. & Lenel, R.

**Verte, A.** [Geological-lithological division of the lower sand-clay layer of Devonian in the Eastland Republic]. *C.R. Acad. Sci. URSS.* **105** 4 1955 : 782-785. [In Russian].

**Via, L.** Contribución al estudio de los decápodos del secundario en España. *An. Esc. Perit. Agric. Barcelona* **10** 1951 : 151-181 1 pl. 14 figs.

**Vibe, C.** The marine mammals and the marine fauna in the Thule district (Northwest Greenland) with observations on ice conditions in 1939-41. *Medd. Grønland* **150** 6 1950 1-117 35 figs. tables. [Not seen].

**Vigneaux, M.** *see* Moyes, J. & Vigneaux, M.

**Villalobos, F., A.** Contribucion al conocimiento de los Atyidae de Mexico. I. Una nueva especie de *Atya* de la ventienti del Pacifico del Estado de Michoacan. *An. Inst. Biol. Mex.* **26** 2 1955 : 459-475 6 pls.

**Vinogradova, M. E.** [Vertical distribution of zooplankton in the waters of Kurile-Kamchatka depression]. *Trud. Inst. Okeanol.* **12** 1955 : 177-183 3 figs. [In Russian].

**Vinogradova, M. E. (2).** [Vertical migrations of zooplankton and their role in the feeding of the deep-sea pelagic fauna]. *Trud. Inst. Okeanol.* **13** 1955 : 71-76. [In Russian].

**Vinogradova, M. E. (3).** [Daily vertical migrations of zooplankton of Far-East seas]. *Trud. Inst. Okeanol.* **8** 1954 : 164-199 25 figs. [In Russian].

**Vinogradov, M. E.** *see* Birshtein, Y. A. & Vinogradov, M. E.

**Vistelius, A. B., Korobkov, I. A., Romanova, M. A., and Semenovich, V. N.** [On the age problem of the lower part of the red layer of Cheleken peninsula]. *C.R. Acad. Sci. URSS.* **105** 4 1955 : 786-789 2 figs. [In Russian].

**Vitagliano-Tadini, G.** Monogenia ed ermafroditismo in *Asellus aquaticus*. *Caryologia* **6** Suppl. Atti IX Congr. Internat. Genet. pt. 2 1954 : 953-957 3 figs.

**Vornatscher, J.** Alte und neue Vorkommen von *Triops cancriformis* Bosc. (Apus) in Wien und Niederösterreich. *Ann. naturh. Mus. Wien* **60** 1955 : 287-290.

**Vorstman, A. G.** Investigations on the life cycle of *Atyaephyra desmaresti* (Mill.). *Verh. int. Ver. Limnol.* **12** 1955 : 469-477 4 figs.

**Vostryakov, A. V.** [On the northern border of the distribution of the marine Apscheron deposits]. *C.R. Acad. Sci. URSS.* **103** 6 1955 : 1081-1084 map. [In Russian].

**Wagstaffe, R. and Fidler, J. H.** The preservation of Natural History Specimens. Vol. I. Invertebrates. London, 1955 : i-xiii, 1-205.

**Walton, B. C. and Stevens, B. A.** Notes on the use of the generic names *Pagurus*, *Eupagurus*, and *Dardanus* (Crustacea : Anomura). *Bull. S. Calif. Acad. Sci.* **54** 1 1955 : 40-42.

**Wautier, V. and J.** Le cancer et les invertébrés. Seconde partie : Reactions provoquées par les substances cancérogènes. *Bull. mem. Soc. Linn. Lyon* **24** 5 1955 : 107-123.

**Webb, H. M.** *see* Brown, F. A. & others.

**Whitehead, R.** Winter live food. *Aquarium J.* **26** 1955 : 35 1 fig.

**Wiborg, K. F.** Zooplankton in relation to hydrography in the Norwegian Sea. *Fiskeridir. Skr. Havundersok.* **11** No. 4 1955 : 1-66.

**Widrig, T. M.** *see* Menzies, R. J. & Widrig, T. M.

**Wiersma, C. A. G.** An analysis of the functional differences between the contractions of the adductor muscles in the thoracic legs of the lobster

*Homarus vulgaris* L. Arch. neérl. Zool. **11** 1955 : 1-13 3 figs.

**Williams, A. B.** A contribution to the life history of commercial shrimps (Penaeidae) in North Carolina. Bull. mar. Sci. Gulf & Caribbean **5** 2 1955 : 116-146 8 figs.

**Williams, A. B. (1).** A survey of the Carolina shrimp nursery grounds. J. Elisha Mitchell sci. Soc. **71** 2 1955 : 200-207 2 figs.

**Williams, A. B. (2).** The genus *Ogyrides* (Crustacea : Caridea) in North Carolina. J. Wash. Acad. Sci. **45** 1955 : 56-59 1 fig.

**Williamson, S. L. and Fontes, E. M.** *Aegla franca* Schmitt. Comun. Inst. nac. B. Rivadavia **3** 1955 : 55-92 1 pl. 3 figs.

**Wilson, M. S.** A new Louisiana copepod related to *Diaptomus* (*Agladiaptomus*) *clavipes* Schacht. Tulane Stud. Zool. **3** 1955 : 37-47 9 figs.

**Wilson, M. S. and Illg, P. L.** The family Clausiidae (Copepoda, Cyclopoida). Proc. biol. Soc. Washington **68** 1955 : 129-141.

**Wolfe, U. K.** *see* Harris, J. E. & Wolfe, U. K.

**Wurtz, C. B. and Roback, S. S.** The invertebrate fauna of some gulf coast rivers. Proc. nat. Acad. Sci. Philad. **107** 1955 : 167-206.

**Yamamoto, Y.** Effect of ovariotomy on the sinus gland of the isopod crustacean *Armadillidium vulgare*. Annot. zool. jap. **28** 1955 : 92-99 2 figs. 1 pl.

**Yamazi, I.** Plankton investigations on inlet waters along the coast of Japan. XIII. The plankton of Obana Bay on the Japan sea coast. XIV. The plankton of Turuga Bay of the Japan sea coast. XV. The plankton of Yosa-Nackai and Kumipama Bay, enclosed bays on the Japan sea coast. Publ. Seto Mar. biol. Lab. **4** 1 1954 : 103-145.

**Yanov, E. N.** [Stratigraphy of the Devonian deposits of the Ribinsk depression]. C.R. Acad. Sci. URSS. **104** 5 1955 : 767-770. [In Russian].

**Yashnov, V. A.** *see* Jashnov, W. A.

**Yonge, C. M.** Egg attachment in "*Crangon vulgaris*" and other Caridea. Proc. roy. Soc. Edinb. **65B** 1955 : 369-400 11 figs.

**Zalányi, B.** Kagyólsráck (Ostracoda) faunák retégiani értékelése. Evaluation stratigraphique des faunes d'Ostracodes. Jber. ung. geol. Aust. **1953** 2 1955 : 503-528. [French and Russian summaries].

**Zariquiey Alvarez, R.** Decápodos españoles. VIII. Una nueva especie del género *Plesionika* Bate. Publ. Inst. Biol. apl. Barcelona **19** 1955 : 105-113. [English summary].

**Zariquiey Alvarez, R. (2).** Decápodos españoles. VI. Coloración en vins de algunos Eupagurinae Ortman. Bol. Soc. esp. Hist. nat. **50** 2 Biol. 1952 : 291-298.

**Zariquiey Alvarez, R. (3).** Crustaceos decapodes de la región de Cadaqués (España). Vie et Milieu **6** 3 1955 : 397-409 2 figs.

**Zariquiey Alvarez, R. (4).** Decápodos españoles. X. El *Macropipus parvulus* (Parisi 1915) es especie válida. Publ. Inst. Biol. apl. Barcelona **21** 1955 : 91-100 2 figs.

**Zariquiey Alvarez, R.** *see* Forest, J. & Zariquiey Alvarez, R.

**Zenkevich, L. A. and others.** [Geographical distribution of fish and other economic animals in Okholsk and Behring seas]. Trud. Inst. Okeanol. **14** 1955 : 1-120 illust. [In Russian].

**Zevina, G. B. and Tarasov, N. I.** [New Balanoida for the Soviet Black-sea fauna]. Trav. Sta. biol. Sebastopol **8** 1954 : 341-346 8 figs. [In Russian].

**Zipf, E. M.** Observations on the effects of eyestalk extirpation on the female crayfish, *Cambarus longulus longulus* Girard. Virginia J. Sci. N.S. **6** 4 1955 : 247.

**Zwalawenburg, R. H. van.** The insects and certain other arthropods of Carton Island. Atoll Res. Bull. No. 41 1955 : 1-11.

## II.—SUBJECT INDEX

## GENERAL

**Text-books.**—General account, **Chabonis**, L. & F.; *Calanus*. **Marshall**, S. M. & **Orr**, A. D.; Animal Camouflage, **Stephenson**, E. M. & **Stewart**, C.

**Nomenclature.**—**Direction** 11, 12, 15, 25; **Opinions** 332, 359, 369; **Dollfus**, R.; **Forest**, J. & **Holthuis**, L. B.; **Gurney**, R.; **Hemming**, F., F. (1-4); **Holthuis**, L. B. (1-2); **Illg**, P. L.; **Tasch**, P.; **Walton**, B. C. & **Stevens**, B. A.

**Terminology.**—Potamonid crabs, **Bott**, R. (1).

**Economic.**—Fisheries, **Ahmad**, N.; **Anderson**, W. W. & **Lindner**, M. J.; **Gamulin**, T.; **Hildebrand**, H. H.; **Kow**, Ah. T.; **Lindberg**, R. G.; **Menon**, M. K.; **Nakai**, Z. (2); **Pillai**, N. K. (1); **Popovici**, Z. & **Angelescu**, V.; **Thomas**, H. J. (2); **Williams**, A. B. (1); **Williams**, A. M.; Experiment in prawn culture **Menon**, M. R.; Marking experiments, shrimp, **Menzel**, R. W.; Lobsters, **Thomas**, H. J. (1); Humane killing of crabs, **Baker**, J. R.; Control of crabs with BHC, **Jordan**, H. D. Woodborers, **Barnard**, J. L. (6); **Becker**, G. & **Kampf**, W.-D.; **Bourdillon**, A.; **Edmondson**, C. H.; **Ganapati**, P. N. & **Nagabhushanan**, R.; **John**, P. A.; **Menzies**, R. J. & **Widrig**, T. M.; **Roch**, G. F.; **Shiino**, S. M. (24); **Srinivasan**, T. K.; Harm caused to young fishes by *Cyclops*, **Oliva**, O. & **Sládeček**, V. Eyestalk extract effect on plant growth, **Otsu**, T. & **Hanoaka**, K. I.; *Artemia salina* as test organism, **Michael** A. S., **Thompson**, C. G. & **Abramovitz**, M.; Control of *Paratelphusa*, **Ali**, J. A.; Amphipoda, **Cărăușu**, S., **Dobreanu**, E. & **Manolache**, C.; **Hynes**, H. B. N. (1); Mussel parasite, *Mytilicola*, **Hepper**, B. T.

**Methods** (See also Culture Methods under Ecology & Habits).—Marking of shrimp, **Menzel**, R. W.; Trapping, tagging & marking Lobsters, **Lindberg**, R. G.; Plankton Trawl, **Colman**, J. S. & **Segrove**, F. (2); Cleaning microfossils, **Kesling**, R. V. (2); Diving methods, **Lindberg**,

R. G.; Collecting Amphipoda, **Cărăușu**, S., **Dobreanu**, E. & **Manolache**, C.; **Hynes**, H. B. N.; Preservation of crustacea, **Wagstaffe**, R. & **Fidler**, J. H.; Fishing for *Penaeus*, **Hildebrand**, H. H.; Control of *Paratelphusa*, **Ali**, J. A.; Humane killing of crabs, **Baker**, J. R.

**Museums and Institutions.**—Stomatopoda in Australian Museum, **Stephenson**, W. & **McNeill**, F.; Fossils in New York State Museum, **Kilfoyle**, C. F.; 105 yrs. hydrobiol. research—Bosnia & Hercegovina, **Milutin**, G. O.; Hydrobiology on the Lago Sante Parmense, **Moroni**, A.; Reunion of carcinologists at Cadaques-Banyuls, **Monod** & others (1).

**Obituaries.**—A. Schellenberg, **Peus**, F.

**Bibliographies.**—**Sawyer**, F. C.; Supplementary note on C. S. Rafinesque, **Holthuis**, L. B. (5); Bibliography of Ostracoda, **Howe**, H. V.; Lobster and spiny lobster, **Dawson**, C. E.

## STRUCTURE

**General Anatomy.**—*Gecarcinus*, *Ocyrope*, *Uca*, *Cardisoma*, **Peters**, H. M.; *Minuca*, *Uca*, **Peters**, H. M.; Euphausiacea, **Boden**, B. P., **Johnson**, M. W. & **Brinton**, E.; Amphipoda, **Cărăușu**, S., **Dobreanu**, E. & **Manolache**, C.; *Idotea*, **Naylor**, E. (3); Anaspidacea, **Siewing**, R.; *Tripetesa*, **Tomlinson**, J. T.; *Calanus*, **Marshall**, S. M. & **Orr**, A. P.

**Integument.**—*Potamon*, **Biancamaria**, E.

**Appendages.**—Coxopodite of Oniscoidea, **Arcangeli**, A.; *Limnoria*, mouth-parts, **Becker**, G. & **Kampf**, W. D.

**Nervous system.**—*Panulirus*, **George**, G. J., **Reuben**, N. & **Muthe**, P. T.; *Praunus*, **Alexandrowicz**, J. S.; Amphipoda, **Cărăușu**, S., **Dobreanu**, E. & **Manolache**, C.; *Limnoria*, **Becker**, G. & **Kampf**, W. D.; Muscle receptor organ in crayfish, **Florey**, E.; Neurosecretory cells of *Telmessus*, **Miyawaki**, M.; Lobsters heart nerves, **Matsui**, K. (1); 'Paragnathes' and 'gnathale' of *Cambarus*, nerves, **Chaudonneret**, J.;



Innervation of retinal cells of *Anomato-cera*, **Vaissière**, R. ; Electron microscope observations on nerve cells, **Robertson**, J. D.

**Muscular system.**—**Castañó**, J. J. ; *Limnoria*, **Becker**, G. & **Kampf**, W. D. ; *Panulirus*, trunk muscles, **George**, C. J., **Reuben**, N. & **Muthe**, B. T. (2) ; Ocular muscles of *Praunus*, **Mayrat**, A.

**Sense organs.**—Amphipoda, **Cărăușu**, S., **Dobreanu**, E. & **Manolache**, C.

**Reproductive organs.**—*Potamon*, **Matsumoto**, K. (2) ; Amphipoda, **Cărăușu**, S., **Dobreanu**, E. & **Manolache**, C. ; *Limnoria*, oostegites, etc., **Becker**, G. & **Kampf**, W.-D.

**Alimentary system.**—*Gammarus*, **Mabillot**, S. ; Amphipoda, **Cărăușu**, S., **Dobreanu**, E. & **Manolache**, C. ; Stomach of *Mesoniscus*, **Radu**, V. G. ; Digestive system of *Panulirus*, **George**, C. J., **Reuben**, N. & **Muthe**, P. T. (1).

**Circulatory system.**—Amphipoda, **Cărăușu**, S., **Dobreanu**, E. & **Manolache**, C. ; Pericardial membrane, **George**, C. J., **Nair**, K. K. & **Muthe**, P. T. ; Pericardial organs, **Miyawaki**, M. (1).

**Other organs.**—Sound production, **Dijkgraaf**, S. (1) ; **Peters**, H. M. ; Statocysts of crayfish, **Dorn**, E. ; Photophores of Caridea and Decapoda, **Dennell**, R. ; Cement glands in *Potamobius*, **Małaczynska-Suchcitz**, Z.

**Histology.**—*Uca*, **Peters**, H. M. ; *Procambarus*, **Sukô**, T. ; Reaction of epidermis of *Crenilabrus* to parasite *Anilocra*, **Pflugfelder**, O. ; Alimentary tract of *Gammarus*, histophysiology, **Mabillot**.

**Cytology.**—Neurosecretory cells of *Telmessus*, **Miyawaki**, M. ; Sperm cytology and cytochemistry, **Fautrez-Firlefyn**, N. & **Fautrez**, J. ; Oocytes of *Simocephalus*, **Reggiani**, M. P. ; Follicle cells and spermatogenesis in *Armadillidium*, **Tadini**, G. V. & **Solima**, A. ; Chromosomes, *Notostraca*, **Longhurst**, A. R. (1) ; *Daphnia pulex*, **Kojima**, Y. ; *Armadillidium*, **Tadini**, G. V. & **Solima**, A. ; Isopods, **Staiger**, H. & **Bocquet**, C. (1) ; Triploid nauplius of *Calanus*, **Harding**,

J. P. & **Marshall**, S. M. ; Sex chromosomes—Ostracods, **Dietz**, R. ; Two forms of sperm in Copepods, **Heberer**, G.

## PHYSIOLOGY

**General.**—*Potamon*, **Biancamaria**, E. ; *Gammarus*, **Berner**, L. ; *Calanus*, **Marshall**, S. M. & **Orr**, A. P.

**Metabolism.**—Effects of parasitic castration, **Reinhard**, E. G. ; Fat metabolism and sex determination in *Moina*, **Dehn**, M. V. ; Activity rhythm of *Tricodactylus*, **Valente**, D. & **Edwards**, G. A. ; Heat death—*Uca*, **Orr**, R. R. ; Loss and gain of heat tolerance by the crayfish, **Spoor**, W. A. ; Sensitivity to electric current, **Rozental**, D. L. & **Shapiro**, E. A.

**Diseases.**—Cancer in invertebrates **Wautier**, V. & **Wautier**, J.

**Circulation.**—Frequency of heart-beat, **Schwartzkopff**, J. ; Electrocardiogram, **Ozawa**, T., **Takesige**, T., **Unno**, H. & **Kudo**, Y. ; Lobsters heart, nervous control, **Matsui**, K. (1) ; Blood plasm of crustaceans, **Rangnekar**, P. V., P. V. (2) ; amino-acids in bloods of crustaceans, **Rangnekar**, P. V. (1) ; **Green**, J. (1) ; **Fox**, H. M. ; **Hildemann**, W. H. & **Keighley**, G. ; Haems in invertebrates, **Phear**, E. A. ; effect of oxygen on concentration, of haem in *Daphnia*, **Fox**, H. M. (1) ; Lipo-protein cells in blood of *Carcinus*, **Sewell**, M. T. ; *Homarus*, size shape and hydration of hemocyanin, **Lauffer**, M. A. & **Swaby**, L. G. ; Changes in blood and urine of *Panulirus* during ecdysis, **Travis**, D. F. (2).

**Serology.**—*Astacura*, **Pryor**, C. W.

**Osmoregulation.**—Terrestrial crabs, **Gross**, W. J. ; Ionic and osmotic concentration in blood and urine of *Pachygrapsus*, **Prosser**, C. L. **Green**, J. W. & **Char**, J. ; Ionic regulation in muscle fibres of *Carcinus*, **Shaw**, J. (1) ; Ionic and osmotic concentration in blood and urine of *Pachygrapsus*, etc., **Prosser**, C. L., **Green**, J. W. & **Chow**, J.

**Respiration.**—**Fairchild**, E. J. ; *Cambarellus*, **Fingerman**, M. ; *Gammarus*, **Berner**, L. ; Cladocera, **Hoshi**, T. ; Rhythms in oxygen consumption, **Brown**, F. A., **Webb**, H. M., **Ben-**

**nett**, M. F. & **Sandeén**, M. I. ; Cutaneous respiration woodlice, **Edney**, E. B. & **Spencer**, J. O. ; Influence of body weight, temp. and season upon oxygen consumption of *Talitrus*, **Clark**, D. P. ; tolerance of oxygen, **Fox**, H. M. & **Taylor**, A. E. R.

**Transpiration**.—Terrestrial Iso-pods, **Bursell**, E.

**Muscle physiology**.—**Florey**, E. ; **Matsui**, K. ; **Shaw**, J. ; **Wiersma**, C. A. G.

**Nerve physiology**.—**Enami**, M., M. (1) ; **Matsui**, K., K. (1) ; Innervation of retinal cells of *Anomalocera*, **Vaissière**, R.

**Neurosecretion**. — **Gabe**, M. ; **Matsumoto**, K., K. (1-4) ; **Maynard**, D. M. ; **Parameswaran**, R.

**Sense organs**.—*Gammarus*, **Berner**, L. ; Eyestalk movements in *Palinurus*, **Dijkgraaf**, S. ; Muscle receptor organs study in Crayfish, **Florey**, E. ; Retinal and optic nerve response of eye of *Panulirus*, **Konishi**, J. (1) ; Electrical studies of compound eye, **Konishi**, J. ; Eye physiology, *Daphnia*, **Harris**, J. E. & **Wolfe**, U. K.

**Excretion**.—Nitrogen excretion in *Carcinides*, **Needham**, A. E. ; Amphipoda, **Cărăușu**, S., **Dobreanu**, E. & **Manolache**, C. Changes in blood and urine of *Panulirus* during ecdysis, **Travis**, D. F. (2) ; Antennal glands, urine production in *Palaemonetes*, **Parry**, G.

**Nutrition and Digestion**.—*Panulirus*, **George**, C.-J., **Reuben**, N. & **Muthe**, P. T. (1) ; *Gammarus*, **Berner**, L. ; **Mabillot**, S. ; *Sphaeroma*, **Jensen**, J. P. ; Copepods, **Beklemishev**, K. V. ; **Marshall**, S. M. & **Orr**, A. P. (3)

**Biochemistry**. — **Fautrez-Firleyn** N. & **Fautrez** ; Susceptibility to sodium chloride, **Fairchild**, E. J. ; Electrophoresis of chromactivating substances in arthropods, **Knowles**, G. W., **Carlisle**, D. B. & **Dupont-Raabe**, M. ; chemical composition of plankton, **Nakai**, Z. (4) ; Blood plasma of crustaceans, **Rangnekar**, P. V. ; Bloods of crustaceans—amino acids, **Rangnekar**, P. V. (1) ; Nutritive capacity of blood of some crustaceans and molluscs, **Rangnekar**,

P.V. (2) ; haems in invertebrates, **Phear**, E. A. ; Astaxanthin in American Flamingo (Crust. carotenoids), **Fox**, D. L. ; fluorescence of chromactive substance in Crustacea—electrophoreses, etc., **Lerma**, B. de, **Dupont-Raabe**, M. & **Knowles**, F. ; Isolation of chromatic substances in Crustacea and Insects, **Carlisle**, D., **Dupont-Raabe**, M. & **Knowles**, F. ; X-organ sinus gland in water balance (*Carcinus*), **Carlisle**, D. B. (2) ; Carotenoids in carapace of *Carcinus*, **Lenel**, R. ; Development of carotenoids in hypoderm of *Carcinus*, **Lenel**, R. (1) ; Ionic regulation in muscle fibres of *Carcinus*, **Shaw**, J. (1) ; ionic and osmotic concentrations in blood and urine of *Pachygrapsus*, etc., **Prosser**, C. L., **Green**, J. W. & **Chow**, J. ; succinic dehydrogenase in neurosecretory cells of *Paratelphusa*, **Nayar**, K. K. & **Parameswaran**, R. ; Proteins purified from lobster nerve extract, **Maxfield**, M. & **Hartley**, R. W. ; Moulting of *Panulirus*, **Travis**, D. F. ; Astacura, **Pryor**, C. W. ; *Homarus*, size, shape and hydration of hemocyanin, **Lauffer**, M. A. & **Swaby**, L. G. ; Euphausiopsin, new photosensitive pigment in Euphausiids, **Kampa**, E. M. ; Vitamin A and Carotenoids in Euphausiacea, **Fisher**, L. R., **Kon**, S. K. & **Thompson**, S. Y. ; *Cypridina* luciferin, **Araki**, T.

**Vitamins**.—Vitamin A, **Fisher**, L. R., **Kon**, S. K., **Plack**, P. A. & **Thompson**, S. Y. ; New vitamin A, isomer in eyes of *Pandalus*, **Lambertsen**, G. & **Braekkan**, O. R.

**Ecdysis**. — **Balesdent-Marquet** ; **Échalier**, G. ; **Lindberg**, R. G. ; **Mahmoud**, M. F. ; **Sewell**, M. T. ; **Spoor**, W. A. ; **Scheer**, B. T. & **Scheer**, M. A. R. ; **Stephens**, G. C. ; **Telford**, S. R., **Lewis**, W. H. & **Kayan**, J. B. ; **Travis**, D. F. ; **Travis**, D. F. (2) ; **Veillet**, A. & **Reynier**, M. ; **Veillet**, A., **Balesdent-Marquet**, M.-L., **Lenel**, R. & **Vernet-Cornubert**, G. ; **Zipf**, E. M.

**Hormones**.—*Carcinus*, **Carlisle**, D. B. (2) ; Oniscoidea, **Legrand**, J. J., J. J. (1) ; **Yamamoto**, Y. ; *Orchestia*, **Charniaux-Cotton**, H. (2) ; Cladocera, **Pyatakova**, M. C. ; Influence of endocrines by *Sacculina*, **Veillet**, A. Eyestalk hormones, **Otsu**, T. &

**Hanaoka, K. I.** ; **Telford, S. R.**, **Lewis, W. H.** & **Kayan, J. B.** ; **Vernet-Cornubert, G.** & **Demeusy, H.** ; **Zipf, E. M.** ; Role of "Y" organ in ecdysis of *Carcinus*, **Echalier, G.** ; Implantation of gonads in *Carcinus*, **Demeusy, N.** (1) ; Endocrine influence on oostegite develop., **Legrand, J.-J.** (1) ; Implantation of "d'organes reactifs", **Demeusy, N.** ; Hormone mechanism of ecdysis in Decapoda, **Veillet, A.**, **Balesdent-Marquet, M. L.**, **Lenel, R.** & **Vernet-Cornubert, G.**

**Colour change.**—**Carlisle, D. B.** (1) ; **Carlisle, D.**, **Dupont-Raabe, M.** & **Knowles, F.** ; **Enami, M.** ; **Figerman, M.** (1) ; **Husson, R.** & **Daum, J.** ; **Lenel, R.** ; **Matsumoto, K.** (1) ; **McWhinnie, M. A.** & **Sweeney, H. M.** ; **Scheer, B. T.** & **Scheer, M. A. R.** ; **Stephenson, E. M.** & **Stewart, C.** ; **Zariquiey, A.** 2).

**Bioluminescence.** — **Araki, T.** ; Photophores of Caridea and Decapoda, **Dennell, R.**

**Reproductive organs.**—Effect of Bopyrid on *Munida*, **Délye, G.** ; Temporary castration with X-rays of *Asellus*, **Balesdent-Marquet, M. L.** ; Implantation of "d'organes reactifs", **Demeusy, N.** ; Implantation of gonads in *Carcinus*, **Demeusy, N.** (1) ; Ablation of ocular peduncles in *Carcinus* and *Pachygrapsus*, **Vernet-Cornubert, G.** & **Demeusy, N.**

## REPRODUCTION AND SEX

**Reproduction.**—Decapoda, **Balss, H.** ; **Broekhuysen, G. J.** ; **Altevogt, R.** (1) ; **Lindberg, R. G.** ; **Vorstman, A.** ; *Neomysis*, **Kinne, O.** ; Amphipoda, **Berner, L.** ; **Cărausu, S.**, **Dobreanu, E.** & **Manolache, C.** ; **Hynes, H. B. N.** ; Oniscoidea, **Legrand, J.-J.** ; **Mahmoud, M.-F.** ; **Matsakis, J.** (1) ; **Shimoizumi, M.** ; Other isopoda, **Becker, G.** & **Kampf, W.-D.** ; **Balesdent-Marquet, M.-L.**, **M.-L.** (2), **M.-L.** (3) ; **Naylor, E.** (1) ; **Jensen, J. P.** ; Cirripedia, **Bousfield, E. L.** (1) ; **Crisp, D. J.** & **Davies, P. A.** ; Copepoda, **Marshall, S. M.** & **Orr, A. P.** ; Cladocera, **Loidl, R.** ; Notostraca, **Longhurst, A. R.** (1) ; Resting stage of *Cyclops*, **Elgmork, K.**

**Secondary Sexual Characters.**—*Asellus*, **Balesdent-Marquet, M.-L.** (2) ; *Halophiloscia*, **Brian, A.**

**Sex determination.**—*Orchestia*, **Charniaux-Cotton, H.** (2) ; *Cabirops*, **Attardo, L.** ; *Moina*, **Dehn, M. v.** ; Sex chromosomes in ostracods, **Dietz, R.** ; Sex determination and chromosomes, **Staiger, H.** & **Bocquet, C.** (1).

**Sex dimorphism.**—Cyclic dimorphism in female Crayfish, **Hobbs, H.** (1) ; Heat tolerance in relation to sex in *Orconectes*, **Spoor, W. A.**

**Sex ratio.**—*Homarus*, **Thomas, H. J.** ; *Cyclops*, **Metzler, S.** ; *Apus*, **Tiwari, K. K.** ; Anostraca, **Massal, I.** 3.

**Hermaphroditism and Inter-series.**—*Parapenaeus*, **Estève, M.** ; *Cambarus*, **Lewis, W. H.** ; *Potamon* ; **Matsumoto, K.** (2) ; *Asellus*, **Vitaliano-Tadini, G.** ; Intersexes in *Orchestia*, **Charniaux-Cotton, H.**

## DEVELOPMENT

**Development.**—Evolution and development, **Vandel, A.** (5) ; *Procambarus*, **Sukô, T.** ; *Metapenaeus*, **Ikematsu, W.** ; *Neomysis*, **Kinne, O.** ; *Livoneca*, **Menzies, R. J.**, **Bowman, T. E.** & **Alverson, F. G.** ; Oniscidae, **Matsakis, J.** ; *Idotea*, **Naylor, E.** (1) ; *Mesamphisopus*, **Dahl, E.** (3) ; *Monodella*, **Stella, E.** (1) ; Cyclops development, **Kiknadze, I. I.** ; Development testes of *Procambarus*, **Sukô, T.**

**Egg.**—**Veillet, A.** & **Reynier, M.** ; In Leucosiidae-carrying, **Drach, P.** ; *Panulirus*, **Lindberg, R. G.** ; Egg laying, *Cambarus*, **Zipf, E. M.** ; Attachment in Caridea, **Yonge, C. M.** ; *Atyaephyra*, egg production, **Vorstman, A. G.** ; *Sphaeroma*, **Jensen, J. P.** ; Follicle cells and spermatogenesis in *Amadillidium*, **Tadini, G. V.** & **Solima, A.** ; Hatching in copepods, **Marshall, S. M.** & **Orr, A. P.** (2) ; Hatching of barnacles, **Barnes, H.** (2).

**Spermatogenesis.**—*Daphnia pulex*, **Kojima, Y.** ; Follicle cells in relation to spermatogenesis in *Amadillidium*, **Tadini, G. V.** & **Solima, A.**

**Embryology.**—*Neomysis*, **Kinne, O.** ; Oniscidae, **Matsakis, J.**, **J.** (1) ; *Cabirops*, **Attardo, C.** ; *Sphaeroma*, **Jensen, J. P.**



**Larval stages.**—**Pillai**, N. K. ; Larval segments and brain structure on phylogeny, **Dahl**, E. (2) ; *Rhithropanopeus*, **Băcescu**, M. ; Peneids, **Heldt**, J.-H. (2) ; *Metapanaeus*, **Ikematsu**, W. ; *Panulirus*, **Lindberg**, R. G. ; *Parribacus*, **Aikawa** & **Isobe** ; Euphausiids, **Lewis**, J. B. ; **Boden**, B. P. ; *Livoneca*, **Menzies**, R. J., **Bowman**, T. E. & **Alverson**, F. G. ; *Ligia*, postembryo, **Matsakis**, J. (1) ; *Porcellio*, **Mahmoud**, M. F. ; *Cyclops* copepodids, **Andreae**, J. C. ; *Epischura*, **Humes**, A. G. ; Triploid nauplius of *Calanus*, **Harding**, J. P. & **Marshall**, S. M.

**Growth.**—*Hymenosoma*, **Broekhuysen**, G. J. ; *Palinurus*, **Gamulin**, T. ; *Panulirus*, **Lindberg**, R. G. ; *Metapanaeus*, **Ikematsu**, W. ; *Penaeus*, **Kubo**, I. ; *Idotea*, **Naylor**, E. (1) ; (3) ; *Sphaeroma*, **Jensen**, J. P. ; *Cabirrops*, **Attardo**, C. ; Oniscidae, **Matsakis**, J. ; *Estheria*, **Massal**, L. (1), (2) ; *Balanus*, **Barnes**, H. (1) ; *Daphnia*, **Kent**, G. G. & **Hodges**, S.

## EVOLUTION AND GENETICS

**Classification.**—Relationships of Anaspidacea, **Siewing**, R. ; **Holt-huis**, L. B. (2) ; Systematic position of Euphausiacea, **Gordon**, I.

**Evolution.**—Malacostraca, **Raw**, F. ; **Dahl**, E. (2) ; Potamomid crabs, **Bott**, R. (1) ; Oniscoidea, **Legrand**, J.-J. (3) ; Isopoda, **Menzies**, R. J., **Bowman**, T. E. & **Alverson**, F. G. ; Bopyridae, **Shiino**, S. M. (20) ; *Anaspides* relationships, **Siewing**, R. ; Evolution in Notostraca, **Longhurst**, A. R. ; Paleogeography Isopoda, **Legrand**, J.-J. (2) ; Evolution in lagoon benthos, **Battaglia**, B. ; Evolution and development, **Vandel**, A. (5) ; Temperature and Evolution, **Margalef**, R. (2)

**Genetics.**—Variation in Cladocera caused by bacteria, **Manuilova**, E. F. ; *Porcellio* genetics, **Lathin**, G. De ; Seasonal variation in *Cyclops* furcal rami, **Smyly**, W. J. P. ; Hybridation experiments with *Tigriopus* spp., **Božić**, B. (2).

## ECOLOGY AND HABITS

**General Ecology.**—**MacGinitie**, G. E. ; deep sea—**Dahl**, E. (4) ;

bottom fauna—**Lellák**, J. ; rock pools—**Ohm**, P. & **Remmert**, H.

**Ecology of Special Forms.**—Decapoda, **Balss**, H. ; Grapsoid crabs, **Tweedie**, M. W. F. ; *Uca* & *Minuca*, **Peters**, H. M. ; Potamonids, **Bott**, R. (1) ; *Uca*, **Altevogt**, R. (1) & (2) ; *Hymenosoma*, **Broekhuysen**, G. J. ; Penaeid prawns, **Williams**, A. B. ; *Penaeus*, **Hildebrand**, H. H. ; *Metapanaeus*, **Ikematsu**, W. ; Paguridae, **Forest**, J. ; *Panulirus*, **Lindberg**, R. G. ; **Gamulin**, T. ; *Neomysis*, **Kinne**, O. ; Oniscoidea, **Kuennen**, D. J. ; *Limnoria*, **Becker**, G. & **Kampf**, W.-D. ; *Idotea*, **Naylor**, E. (3) ; *Eurydice*, **Soika**, A. G. ; *Entonella*, **Shiino**, S. M. (1) ; Amphipoda, **Cărăușu**, S., **Dobreanu**, E. & **Manolache**, C. ; *Gammarus*, **Berner**, I. ; **Hynes**, H. B. N. (1) ; *Derocheilocaris*, **Delamare-Deboutteville**, C. (2) & (4) ; Cladocera, **Manuilova**, E. F. (1) ; Cirripedes, **Utinomi**, H. (1) ; *Chirocephalus*, **Kallinowsky**, H. ; *Lichomolgus*, **Gotto**, R. V. ; *Calanus*, **Marshall**, S. M. & **Orr**, A. P. ; *Idyanthopsis*, **Bocquet**, C. & **Božić**, B.

**Marine habitats.**—**Popovici**, Z. & **Angelescu**, V. ; Littoral and sub-littoral, **Colman**, J. S. & **Segrove**, F. (1) ; **Prud'homme van Reine**, W. J. ; **Clark**, R. B. & **Milne**, A. ; Marine plankton, **Baker**, A. de C. ; **Brodsky**, K. A. (3) ; **Cushing**, D. H. ; **Fincher**, J. A. & **McGinty**, M. S. ; **Fraser**, J. H. ; Planktonic Crustacea indicating sea-currents, **Lubni-Gertzik**, E. A., E. A. (1) ; **Motoda**, S. & **Anraku**, M. & (1) & (2) ; **Nakai**, Z. & (3) & (4) ; **Østvedt**, O.-J. ; **Rees**, C. B. ; **Wiborg**, K. F. ; **Williams**, A. M. ; **Yamazaki**, I. ; Tidal Plankton, **Colman**, J. S. & **Segrove**, F. (2) ; Littoral Lakes, **Cărăușu**, A. ; Interstitial fauna of sand, **Bocquet**, C. & **Lévi**, C. ; sand dwellers, **Božić**, B. (1) ; **Chapuis**, P. A. (3), (10), (11) ; **Delamare-Deboutteville**, C. (3), (5), (6) ; **Delamare-Deboutteville**, C., **Gerlach**, S. & **Siewing**, R. ; **Noodt**, W. & (1) ; Benthos, **Barnard**, J. L. (1) ; **Battaglia**, B. ; **Dahl**, E., E. (4) ; **Dawydoff**, C. ; **Dieuzeide**, R. ; **Gordon**, I. (1) ; **Nilsson-Cantell**, C. A. ; **Nordenstam**, A. ; **Schellenburg**, A.

**Fresh water habitats.**—Bott, R. (1); Brehm, V. (9); Holmquist, C. J.; Hynes, H. B. N. (1); Husson, R. & Daum, J.; Margalef, R.; Sebestyén, O.; Ueno, M. (2); Limnology, Botnariuc, N.; Limnology, Cannicci, G. (2); Comita, G. W. & Edmondson, W. T.; Cushing, D. H.; Damas, H.; Davis, C. C.; Elster, H.-J.; Facinelli, E.; Frey, D. G.; Guryanova, E. F. (2); Herbst, H. V.; Kiefer, F.; Kleerekoper, H.; Kozhov, M. M. (1); Lellák, J.; Leloup, E.; Meel, L. van & Jacquemart, S.; Ragotskii, R. A. & Bryson, A. Ravera, O.; Rodhe, W.; Shcherbakov, A. P.; Sládeček, V. (1); Thomasson, K.; Tonolli, V. (1); Ponds, Hensick, W.; Lyakhovich, V. P.; Ohm, P. & Remmert, H.; Schwoerbel, J.

**Subterranean Habitats.**—Birstein, Y. A. & Borutsky, E. V.; Bresson, J. J.; Brehm, V. (7); Chappuis, P. A. (1, 5, 6, 7, 9); Dobreanu, E.; Manolache, C. & Puscariu, V. (1); Fryer, G.; Harding, J. P.; Husson, R. & Daum, J.; Ito, T.; Karaman, S. L. (1 & 6); Kiefer, F. (4 & 5); Noodt, W. (5); Parenzan, P.; Radu, V. G.; Rioja, E. (2); Řeháčková, V.; Vandel, A. & (1) & (2).

**Brackish water.**—Barlow, J. P.; Lagerspetz, K.; Sommani, E.

**Terrestrial habitats.**—Land habitat, Decapoda, Balss, H.; Eglitis, V. K.; Terrestrial ostracod, Harding, J. P. (3).

**Environmental effects.**—Huzita, S.; light responses, Moore, H. B.; coloured light, Nagano, T.; Temperature, Uca, Altevogt, R. (2); Potamon, Biancamaná, E.; Talitrus, Clark, D. P.; Sphaeroma, Jensen, J. P.; Margalef, R. (2); Moore, H. B.; Uca, Orr, P. R.; Schwartzkopff, J.; Effects of X-rays, Grosch, D. S. & Erdmann, H. E.; Effect of pressure, Knight-Jones, E. W. & Qasim, S. Z.

**Naturalisation and acclimatization.**—Rhithropanopeus, Băcescu, M.

**Biometrics.**—Ligia, Matsakis, J. (1); eggs of copepods, Røen, U.; Sex ratio and mortality rates in

Homarus, Thomas, H. J.; Aegla, Williamson, S. L. & Fontes, E. M.

**Population Studies.**—Beklemishev, K. V.; Niphargus, Brehm, V. (7); Daphnia, Edmondson, W. T.; Eudiaptomus, Elster, H.-J.; In artificial lake, Facinelli, E.; Slobodkin; Porcellio, Lathin, G. De; Panulirus, Lindberg, R. G.; Idotea, Naylor, E. (1); Lake copepods, Ravera, O.; Tonolli, V.; Daphnia, Green, J.; Daphnia, Ragotskii, R. A. & Bryson, A.; Sphaeroma, Hoestlandt, H. (1); Lake Plankton, Sebestyén, O.

**Migrations.**—Lobsters, Thomas, H. J. (1); Panulirus, Lindberg, R. G.; Limnoria, Menzies, R. J. & Widrig, T. M.; Microplankton carried by lacustrine on flow currents, Tonolli, V. (1); Vertical migration, Cushing, D. H.; Vertical migration, Daphnia, Harris, J. E. & Wolfe, U. K.; Vinogradov, M. E., M. E. (2).

**Seasonal, diurnal and other rhythms.**—Seasonal changes Edmondson, W. T.; Kinne, O.; in changes, Kozhov, M. M.; seasonal changes in zooplankton, Kusmorskaya, A. P.; Ponomareva, L. A. (1); Ravera, O.; Smyly, W. J. P.; Vinogradova, M. E. (1); Rhythms in oxygen consumption, Brown, F. A., Jr., Webb, H. M., Bennett, M. F. & Sandeen, M. I.; Fingerman, M.; Daily and tidal rhythms in Callinectes, Fingerman, M. (1); Walking activity rhythm of Trichodactylus, Valente, D. & Edwards, G. A.; Activity rhythm, Valente, D. & Edwards, G. A.; Uca, Brown, F. A., Webb, H. M. & Bennett, M. F.; Crayfishes, Hobbs, H. H. (1).

**Feeding Mechanisms.**—Uca, Altevogt, R. (1) & (2); Panulirus, George, C. J., Reuben, N. & Muthe, P. T. (1); Lindberg, R. L.; Hippa, Matthews, D. C.; Metapenaeus, Ikematsu, W.; Cellulose digested by Melita, John, P. A.; Idotea, Naylor, E. (2); food of cladocera, Heyningman, H. E. van; Euphasiids as food of fishes and whales, Ponomareva, L. A.; Quantitative filter feeding in crustacea, Jørgensen, C. B.; Heyningen, H. E. van; Feeding of Calanus on labelled phytoplankton, Marshall, S. M. & Orr, A. P. (1);

phytoplankton inhibiting feeding of *Daphnia*, **Ryther**, J. H.

**Behaviour.**—*Uca*, **Altevogt**, R. (1) & (2); *Uca*, **Gordon**, H. R. S.; *Uca*, *Ocypode*, *Ucides*, *Cardisoma*, **Peters**, H. M.; *Panulirus*, **Lindberg**, R. G.; *Hippa*, feeding habits, **Matthews**, D. C.; Penaeidae, **Williams**, A. B.; *Limnoria*, **Menzies**, R. J. & **Widrig**, T. M.; *Monodella*, **Stella**, E. (1); Barnacles, **Southward**, A. J. (1); **Barnes**, H. (3); Gregarious settling reaction of barnacle spat as measure of systematic affinity, **Knight-Jones**, E. W.; Barnacle cyprids behaviour in relation to water movements over a surface, **Crisp**, D. V.; Direction-finding *Talitrus* and *Talorchestia*, **Pardi**, L. & **Grassi**, M.; Sense of time in *Talitrus*, **Papi**, E.; Responses to coloured light, **Nagano**, T.; Crustacea eating fish on the hook, **Heldt**, J.-H.; Auditory and visual signalling in Grapsoid crabs, **Tweedie**, M. W. F.; Activity rhythm of *Trichodactylus*, **Valente**, D. & **Edwards**, G. A.; Resting stage of *Cyclops*, **Elgmork**, K.

**Tropisms.**—**Crisp**, D. J.; **Darnil**, A.; **Pardi**, L. & **Grassi**, M.; **Nagano**, T.; **Shcherbakov**, A. P.

**Predators.**—Flamingo eating *Panulirus*, **Fox**, D. L.; Aquarium fish, **Whitehead**, R.; whales, **Nakai**, Z. (1); fish, **Nakai**, Z. & **Honjo**, K.; Bladders of *Utricularia* spp. in traps for Entomostraca, **Deckart**, M.

**Diseases.**—Cancer in invertebrates, **Wauthier**, V. & J.

**Parasitism.**—**Délye**, G.; **Monod**, T.; **Nouvel**, A. & **Hoenigman**, J.; **Stolyarov**, V. P.; Parasitic castration; **Reinhard**, E. G.; *Cabirlops*, a hyperparasite on *Bopyrina*, **Attardo**, C.; *Schistocephalus* infections in *Cyclops*, **Clarke**, A. S.; *Aegla* infected with *Temnocephala*, **Williamson**, S. L. & **Fontes**, E. M.; Acanthocephala infecting Gammarids, **Hynes**, H. B. N.; *Danalia* on *Hapalocarcinus*, **Fize**, A.; Sacculization of *Charybdis*, **Matsu-mota**, K.; *Livoneca* on *Carnegiella*, **Reichenbach-Klinke**, H. H.; *Eupagurus-Peltogasterella*, **Oguro**, C.; Reaction of epidermis of *Grenilabrus* to parasite *Anilocra*, **Pflugfelder**, O.; *Calanus*, **Marshall**, S. M. & **Orr**, A. P.

**Commensalism.**—Leeches symbiotic on decapoda, **Meyer**, M. C. & **Barden**, A. A.; Epibionts of *Daphnia*, **Green**, J.; Spongiculous amphipods, **Barnard**, J. L. (5); Crustaceans associated with coral, **Dawydoff**, C.

**Brehm**, V. (9); *Balanus*, **Derzhavin**, A. N.; Calanoids, **Brodsky**, K. A. (1), (2) & (5); *Neomysis*, **Kinne**, O.; *Sphaeroma* (Northern limits), **Hoestlandt**, H.; Amphipoda, **Cărăusu**, S., **Dobreanu**, E. & **Manolache**, C.; Mysidacea, **Tattersall**, O. S.; *Aegla*, **Williamson**, S. L. & **Fontes**, E. M.

## GEOGRAPHICAL DISTRIBUTION

### 1. LAND AND FRESHWATER.

#### PALAEARCTIC REGION

**Africa North.**—**Harding**, J. P. (4); **Vandel**, A. (1) & (3); Morocco, **Kiefer**, F. (2); **Brehm**, V. (3); Tunisia, **Burollet**, P. F.

**Atlantic Islands.**—Azores, **Chapman**, G.

**Austria.**—**Frey**, D. G.; **Vornatscher**, J.

**Belgium.**—**Capart**, A.

**British Isles.**—**Hynes**, H. B. N. and (1); **Smyly**, W. J. P. (2); **Fryer**, G.; Lake district, **Smyly**, W. J. P. (1); Yorks, **Fryer**, G. (2); Liverpool, **Galliford**, A. L. (1); Dorset, **Dalton**, R. F.; Ireland, **Farran**, G. P.; Cheshire, **McMillan**, N. F.

**China.**—**Uéno**, M.

**Czechoslovakia.**—**Brtek**, J. (1) & 2; **Lellák**, J.; **Romanovsky**, A. & (1); **Sládeček**, V. & (1), (2), (3); **Sládeček**, V. & **Řeháčkova**, V.; **Sterba**, O.

**Europe, Central.**—**Borovitzkaya**, M. P.; **Bitzkaya**, N. A.

**Europe, South.**—**Bresson**, J.; **Chappuis**, P. A. (1); **Franz**, H. & others; **Ohm**, P. & **Remmert**, H.; **Vandel**, A.

**France.**—**Aguesse**, P.; **Drooger**, C. W. & **Kaasschieter**, J. P. A. &



**Key, A. J. ; Joly, R. ; Kiefer, F.** (5) ; **Legrand, J.-J.** (3) ; **Leloup, E., Meel, L. van & Jacquemart, S.** ; **Petit, G. & Schachter, D.**

**Germany.** — **Dittmar, H.** ; **Herbst, H. V. & (1)** ; **Hensiek, W.** ; **Kiefer, F. & (1)** ; **Perner-Maregold, B.** ; **Schwoerbel, J.**

**Greece.**—**Beier, M.** ; **Buturović, C.** ; **Chappuis, P. A. (6)** ; **Karaman, S. L. (2), (5) & (6)** ; **Strouhal, H.** ; **Vandel, A.**

**Greenland.**—**Vibe, C.**

**Holland.**—**Ruting, J. & Stock, J. H.**

**Hungary.**—**Kertész, G.** ; **Lieder, K.** ; **Ponyi, E.** ; **Sebestyén, O.**

**Italy.**—**Brian, A. & (2)** ; **Cannicci G. (2)** ; **Chappuis, P. A. (4) & (8)** ; **Facinelli, E.** ; **Holmquist, C.** ; **Lenz, F.** ; **Kiefer F. (4)** ; **Moroni, A. (1)** ; **Noodt, W. (3)** ; **Parenzan, P.** ; **Ravera, O.** ; **Sommani, E.** ; **Schmölzer, K.** ; **Stella, E. (1)** ; **Tonolli, V.**

**Japan.**—**Chappuis, P. A. (8) & (9)** ; **Ito, T.** ; **Shiino, S. M. (17)** ; **Uéno, M. (1) & (2)** ; **Utinomi, H.**

**Rumania.**—**Băcescu, M.** ; **Bănărescu, P. & Sérban, M.** ; **Botnarinc, N.** ; **Cărausu, A. (2)** ; **Dobreanu, E.** ; **Manolache, C. & Puscarin, V. & (1)** ; **Radu, V. G. & (1)** ; **Radu, V. G. & V. V. & Cadariv, M. I.**

**Spain.**—**Margalef, R. & (1).**

**Sweden.**—**Larsson, N.** ; **Holmquist, C.**

**Turkey.**—**Chappuis, P. A. (8)** ; **Kiefer, F. (3)** ; **Lindberg, K. (3).**

**U.S.S.R.**—**Buyanovskaya, A. A.** ; **Kozhov, M. M. (1)** ; **Kobyakova, Z. I.** ; **Menyailenko, P. A.** ; **Mazepova, G. F.** ; **Semikhatova, S. V. & Menyailenko, P. A.** ; **Sheidaev, H. M.** ; **Shneider, G. F.** ; **Vistelius, A. B. & Korobkov, I. A.** ; **Romanova, M. A. & Semenovitch, V. N.** ; **Vostriyakov, A. V.**

**Yugoslavia.**—**Buturović, A. (2)** ; **Holmquist, C.** ; **Karaman, S. L. & (1), (4), (5).**

## ORIENTAL REGION

**India.**—**Ali, J. A.** ; **Altevogt, R. (1)** ; **Chappuis, P. A. (2)** ; **Ganapati, P. N. & Nagabhushanan, R.** ; **Malaviya, R. B.**

**Malayan Orient.**—**Java, Brehm, V. (6)** ; **Tweedie, M. W. F.**

## AUSTRALIAN REGION and POLYNESIA

**Australia.**—**Brehm, V. (1)** ; **Lindberg, K.**

**New Zealand.**—**Jolly, V. H.**

**Pacific Islands.**—**Chappuis, P. A. (7).**

## ETHIOPIAN REGION

**Africa.**—**Gauthier, H.**

**East Africa.**—**Bott, R. (1)** ; **Brehm, V. (2)** ; **Chappuis, P. A. (10)** ; **Delamare-Deboutteville, C. & Chappuis, P. A.** ; **Fourmanoir, P.**

**West Africa.**—**Bott, R. (1)** ; **Damas, H.** ; **Delamare-Deboutteville, C. & Nunes-Ruivo, C. P.** ; **Harding, J. P.** ; **Rome, R.** ; **Roth-Woltereck, E.**

**South Africa.**—**Barnard, K. H. & (2)** ; **Lieder, K.**

**Madagascar.**—**Brehm, V. (5)** ; **Chappuis, P. A. (3)** ; **Gauthier, H.** ; **Kiefer, F. (6)** ; **Ruffo, S.**

## NEARCTIC REGION

**Alaska.**—**MacGinitie, G. E.**

**Canada.**—**Bardach, J. E.** ; **Breson, J.**

**U.S.A.**—**Hobbs, H. H.** ; **Alabama, Fincher, J. A. & McGinty, M. S.** ; **Carolina, Ferguson, E.** ; **Colorado, Pennak, R. W. & (1)** ; **Florida, Wurtz, C. B. & Roback, S. S.** ; **Indiana, Eberly, W. R.** ; **Louisiana, Penn, G. H.** ; **Wilson, M. S.** ; **Ohio, Davis, C. C.** ; **Texas, Wurtz, C. B. & Roback, S. S.** ; **Wisconsin, Ragotskii, R. A. & Bryson, A.**

## CENTRAL AMERICA

**Mexico.**—**Brehm, V. (4)** ; **Lindberg, K. (2)** ; **Rioja, E. (1) & (2)** ; **Villalobos, F. A.**

**Venezuela.**—**Brehm, V. (8).**

**West Indies.**—Gruvel, A. ; Rioja, E.

## SOUTH AMERICA

**Lemos de Castro**, A. (2) ; **Holt-huis**, L. B. ; **Reichenbach-Klinke**, H. H. ; **Williamson**, S. L. & **Fontes**, E. M.

**Argentine.**—**Margalef**, R. & **Balcells**, E. ; **Olivier**, S. R. ; **Ringuelet**, R. A.

**Brazil.**—**Castro**, A. L. de and (3) ; **Gruener**, H.-E. ; **Kleerekoper**, H. ; **Noodt**, W. ; **Oliveira**, L. de

**Chile.**—**Haig**, J.

**Peru.**—**Gruener**, H.-E. ; **Harding**, J. P. (1), (2) ; **Löffler**, H.

**Tierra del Fuego.**—**Thomasson**, K.

**Venezuela.**—**Brehm**, V. (8).

## 2. MARINE

### ARCTIC

**Bousfield**, E. L. (2) ; **Comita**, G. W. & **Edmondson**, W. T. ; **Edmondson**, W. T. & **Fontaine**, M. ; **Jashnov**, W. A. ; **MacGinitie**, G. E. ; **Polyansku**, Y. I. ; **Shoemaker**, C. R. ; **Vinogradov**, M. B. ; **Zenkevich**, L. A. & others ; **White Sea**, **Shulman**, S. S. & **Shulman-Albova**, R. E.

### NORTH TEMPERATE

**Adriatic Sea.**—**Cannicci**, G. ; **Karaman**, S. L. (3), (4) ; **Petkovski**, T. K. ; **Soika**, A. G.

**Atlantic Islands.**—**Belle-Isle**, **Le-grand**, J. J. (2) ; **Canaries**, **Noodt**, W. (4).

**Atlantic North.**—**Nordenstam**, A. ; **Soika**, A. G. ; **American side**—**Williams**, A. B. (1), (2) ; **Williams**, A. M. ; **Lewis**, J. B. ; **Shellenberg**, A. ; **N. East**—**Božic**, B. (1) ; **Chapman**, G. & **Santler**, J. E. ; **Forest**, J. ; **Heegaard**, P. ; **Hoestlandt**, H. ; **Roch**, G. F. ; **N. West**—**Bousfield**, E. L. (1) ; **Bowman**, T. E. ; **Hildebrand**, H. H. ; **Humes**, A. G. (1) ; **Klawe**, W. L. ; **Menzies**, R. J. & **Miller**, M. A. ; **Menzies**, R. J. & **Bowman**, T. E. & **Alverson**, F. G. ; **Sanders**, H. L.

**Baltic Sea.**—**Noodt**, W. (1).

**Bay of Biscay.**—**Delamare-Deboutteville**, L. (1), (4) ; **Delamare-Deboutteville**, C. ; **Gerlach**, S. & **Siewing**, R. ; **Fischer-Piette**, E.

**Black Sea.**—**Dolgopolskaya**, M. A. & (1), (2) ; **Pauli**, V. L. & (1) ; **Zevina**, G. B. & **Tarasov**, N. T. ; **Băcescu**, M. ; **Cărăușu**, S. ; **Doboreanu**, S. & **Manolache**, C.

**British & Irish Coastal Waters.**—**Clark**, R. B. & **Milne**, A. ; **Colman**, J. S. & **Segrove**, F. & (2) ; **Connell**, J. H. ; **Duhig**, M. & **Humphries**, C. L. ; **Fraser**, J. H. ; **Galliford**, A. L. ; **Gotto**, R. V. (1) ; **Hoestlandt**, H. & (1) ; **Jefferson**, G. T. ; **Lefèvre**, P. & **Lucas**, G. ; **Naylor**, E. & (1), (3) ; **Prud'homme van Reine**, W. J. ; **Roe**, K. M. ; **Thomas**, H. J. (2) ; **Ticehurst**, N. F.

**Caspian Sea.**—**Rumanova**, N. N.

**English Channel.**—**Bocquet**, C. & **Levi**, C. ; **Hoestlandt**, H. ; **Solland**, E. ; **Sueur**, Le R. F. & (1).

**Mediterranean Sea.**—**Battaglia**, B. ; **Bocquet**, C. & **Božić**, B. ; **Carasu**, A. & (2) ; **Chappuis**, P. A. (11) ; **Delamare-Deboutteville**, C. & (2) & (3) ; **Dieuzeide**, R. ; **Dieuzeide**, R. & **Goeau-Brissonnière**, W. ; **Forest**, J. & **Zariquiey**, A. ; **Holthuis**, L. B. (4) ; **Holthuis**, L. B. & **Gottlieb**, E. ; **Matsakis**, J. (1) ; **Monod**, T. & others ; **Roch**, G. F. ; **Ruggieri**, G. (1) ; **Soika**, A. G. ; **Zariquiey**, A. (1), (3), (4) ;

**North Sea.**—**Brandes**, C.-H. ; **Christiansen**, E. N. ; **Østvedt**, O.-J. ; **Rees**, C. B. ; **Soot-Ryen**, T. ; **Thomas**, H. J. (1), (2) ; **Wiborg**, K. F.

**Pacific, North.**—**Boden**, B. P. ; **Johnson**, M. W. & **Brinton**, E. ; **Bott**, R. (2) ; **Bowman**, T. E. (3) ; **Birshtein**, Y. A. & **Vinogradov**, M. E. ; **Brodsky**, K. A. & (1)-(4) & (6) ; **Bulicheva**, A. I. (2) ; **Chace**, F. A. ; **Edmondson**, C. H. ; **Guryanova**, E. F. & (1) ; **Kusakin**, O. G. (1) ; **Lomakin**, N. B. & (1) ; **Motoda**, S. & **Anraku**, M. (1) ; **Japanese side**—**Anraku**, M. ; **Aikawa**, H. & **Isobe**, K. ; **Boschma**, H. (4) ; **Bulicheva**, A. I. (1) ; **Ike**

**matsu**, W. ; **Kubo**, I. (1) ; **Matsumoto**, K. ; **Motoda**, S. & **Anraku**, M. ; **Nakai**, Z. (1) & (2) ; **Nakai**, Z. & **Honjo**, K. ; **Ponomareva**, L. A. (2) ; **Sakai**, T. & (1) ; **Shiino**, S. M. & (1)-(5), (7)-(19) & (21)-(26) ; **Utinomi**, H. (2) ; **Yamazaki**, I. ; American side—**Barnard**, J. L. (1, 4-6) ; **Butler**, T. H. ; **Bowman**, T. E. (2) ; **Cornwall**, I. E. ; **Illg**, P. L. (1) ; **Shoemaker**, C. R. (1) ; **Stock**, J. H. (1) ; Indo-China seas—**Boschma**, H. (1) ; **Dawydoff**, C. ; **Delamare-Deboutteville**, C. & **Nunes-Ruivo**, C. P. (2) ; **Fize**, A. ; **Fize**, A. & **Serene**, R. ; **Shen**, J. ; Philippine Islands—**Monod**, T. (2) ; Hawaii—**Barnard**, J. L. (3) ; **Edmondson**, C. H.

**Red Sea**.—**Stella**, E.

### TROPICAL

**Atlantic**.—**Clarke**, W. D. ; **Jones**, N. S. ; **Oliveira**, L. P. H. de (1) ; African side—**Chappuis**, P. A. & **Kunz**, H. ; **Forest**, J. ; **Lang**, K. ; **Noodt**, W. (14) ; **Rahm**, U. ; American side—**Carvalho**, J. de P. ; **Castro**, A. L. ; **Lindberg**, R. G. ; **Oliveira**, L. P. H. de (2).

**Indo-Pacific**.—**Altevogt**, R. (1) ; **Boschma**, H. (2, 5 6) ; **Chappuis**, P. A. (3) ; **Holthuis**, L. B. (3) ; **John**, P. A. ; **Kow**, Ah. T. ; **Monod**, T. ; **Serene**, R. ; **Srinivasan**, T. K. ; **Tweedie**, M. W. F. ; **Utinomi**, H. (2) ; Indian Ocean—**Ahmad**, N. ; **Altevogt**, R. (2) ; **Menon**, M. K. ; **Kubo**, I. (2) ; **Kurién**, C. V. ; **Rangnekar**, M. P. ; **Roch**, G. F. ; **Pillai**, N. K. (1) ; American side—**Lindberg**, K. (1) ; **Olivier**, S. R. (1).

### SOUTH TEMPERATE

**African waters**.—**Barnard**, K. H. (1-4) ; **Boden**, B. P. ; **Roch**, G. F.

**Atlantic**.—**Gordon**, I. (1) ; American side—**Hartmann**, G. ; **Oliveira**, L. P. H. de (3) ; **Szidat**, L.

**Australian waters**.—**Racek**, A. A. ; **Stephenson**, W. & **McNeill**, F.

**Pacific**.—**Haig**, J. ; **Lindberg**, K. (4) ; **Holthuis**, L. B. ; **Bahamonde**, V.

**New Zealand waters**.—**Dell**, R. K. ; **Hurley**, D. E. & (1-2) ; **Menzies**, R. J. & **Miller**, M. A. (1).

### ANTARCTIC

**Baker**, A. de C.

### PALAEONTOLOGY

**Bernhauser**, A.

Amphipoda, **Cărăușu**, **Dobreanu**, & **Manolache** ; Oniscoidea, **Legrand**, J.-J. (3).

### PALAEOZOIC

**Bielecka**, W.

Ostracods, **Pokorný**, V.

Phyllopods, **Varentzov**, I. M.

**Ordovician**.—**Kesling**, R. V. (5).

**Devonian**.—**Gibson**, L. B. ; **Lehmann**, W. M. ; **Kesling**, R. V. (1, 3, 4, 6) ; **Kesling**, R. V. & **Copeland**, M. J. ; **Novozhilov**, N. I., N. I. (1), (2) ; **Příbyl**, A. ; **Varentzov**, I. M. (1) ; **Verte**, A. ; **Yanov**, E. N.

**Carboniferous**.—**Aizenberg**, D. E. & **Brazhnikova**, N. E. ; **Benson**, R. H. ; **Novozhilov**, N. I. (3) ; **Paproth**, E. & **Schmidt**, W. ; **Pozner**, V. M.

**Permian**.—**Lapchik**, F. E. ; **Stefanenko**, A. & **Makhnach**, A. S.

### MEZOZOIC

**Remy**, J. M.

**Triassic**.—**Kasimova**, G. K., **Kuznetzova**, Z. V. & **Mikheeva**, Z. F. ; **Lapchik**, F. E. ; **Müller**, A. H.

**Jurassic**.—**Bachmayer**, F. ; **Danisch**, E. ; **Donze**, P. & **Grékoff**, H. ; **Saint-Seine**, R. de ; **Triebel**, E.

**Cretaceous**.—**Carlsson**, J. G. ; **Davadie**, C. & **Emberger**, J. ; **Hill**, B. L. ; **Richardson**, E. S. ; **Stchépinsky**, A. ; **Tuaev**, N. P. ; **Via**, L.

### TERTIARY

**Bott**, R. (1) ; **Hill**, B. L. ; **Shikama**, T.

**Eocene**.—**Brown**, M. M. & **Castell**, C. P. ; **Sohn**, I. G.

**Oligocene**.—**Drooger**, C. W., **Kaaschieter**, J. P. A. & **Key**, A. J. ; **Moyes**, J. & **Vigneaux**, M. ; **Zalanyi**, B.



**Miocene.**—Palmer, A. R. & Bassett, A. M. ; Puri, H. S. ; Veiga Ferreira, O. da ; Zálányi, B.

**Pliocene.**—Boenzi, S. ; Tomić-Džodžo, R. ; Zálányi, B.

**Pleistocene.**—Lüttig, G.

**Holocene.**—Deevey, E. S., Jr.

#### QUATERNARY

Gramm, M. N. ; Hessland, I. ; Hornibrook, N. de B.

### III.—SYSTEMATIC INDEX

#### MALACOSTRACA

Malacostraca, neurosecretion, Gabe, M. ; origin, relationships, phylogeny, Raw, F. ; distribution of deep-sea crustacea, Dahl, E. (4).

#### STOMATOPODA

Stomatopoda, Indo-China seas, Dawydoff, C. ; Brazil coasts, Castro, A. L. ; Gulf of Campeche, Hildebrand, H. H. ; Red Sea, Stella, E. ; Australian waters and Museum, Stephenson, W. & McNeill, F.

*Gonodactylus*, Key to Australian spp. synonymy, Stephenson, W. & McNeill, F. ; *G. oestedii* figd., Brazil Coast, Castro, A. L.

*Hemisquilla braziliensis*, figd., Brazil Coast, Castro, A. L.

*Lysiosquilla*, Key to Australian spp., synonymy, Stephenson, W. & McNeill, F. ; *L. scabricauda*, *L. glabriuscula*, *L. excavatrix*, figd., Brazil Coast, Castro, A. L.

*Odontodactylus*, Key to Australian species, synonymy, Stephenson, W. & McNeill, F.

*Pseudosquilla*, Key to Australian spp., synonymy, Stephenson, W. & McNeill, F. ; *P. ciliata*, *P. oculata*, figd., Brazil Coast, Castro, A. L.

*Squilla*, Key to Australian species, synonymy, Stephenson, W. & McNeill, F. ; *S. mantis*, heartbeat fre-

quency study, etc., Schwartzkopff, J. ; *S. schmitti* sp. nov. p. 9, *S. dubia*, *S. prasinolineata*, *S. brasiliensis*, *S. neglecta*, all figd., Brazil Coast, *S. empusa*, *S. panamensis*, also figd. Bol. Mus. nac. Rio de J. (Zool.) 128 1955 : Castro, A. L.

#### DECAPODA

Decapoda, Arctic Ocean, MacGinitie, G. E. ; English Channel, Sollaud, E. ; British Coasts, Colman, J. S. & Segrove, F. (2) ; Prud'homme van Reine, W. J. ; Mediterranean, Holthuis, C. B. & Gottlieb, E. ; Zariquiey, A. (3) ; Azores, Chapman, G. & Santler, J. E. ; El Salvador, Holthuis, L. B. ; Florida & Texas, Wurtz, C. B. & Romback, S. S. ; Gulf of Campeche, Hildebrand, H.-H. ; Indo-China seas, Dawydoff, C.

Decapoda, nomenclature, Directions (11) and (15) ; Declaration (12) ; Hemming, F.

Decapoda, ecology, habitats, reproduction biology, Balss, H. ; leaches symbiotic on decapoda, Meyer, M. C. & Barden, A. A. ; deep sea, Gordon, I.

Decapoda, colour changes, Stephenson, E. M. & Stewart, C. ; luminescence, Dennell, R. ; heartbeat frequency, Schwartzkopff, J. ; gut haemochromogens, Phear, E. A. ; Nutritive capacity of the blood of some crust. and molluscs, Rangnekar, P. V. (2).

Decapoda, larvae of Travancore, Pillai, N. K.

#### REPTANTIA

##### Brachyura

Brachyura, Hachijo Island, Sakai, T. ; Japanese waters, Sakai, T. (1) ; Indo-Pacific, Tweedie, M. W. F. ; N. Zealand waters, Dell, R. K. ; Mediterranean (bottom fauna), Dieuzeide, R.

#### BRACHYGNATHA

##### BRACHYRHYNCHA

†*Achelous delgadoi*, figs., Veiga Ferreira, O. da.

? *Actumnus laevigatus*, figd., **Barnard**, K. H. (4).

*Bathynectes superba*, photo., discussed, **Dieuzeide**, R.

*Callinectes sapidus*, Israel waters, **Holthuis**, L. B. & **Gottlieb**, E.; daily rhythms of colour changes, **Fingerman**, M. (1).

*Cancer pagurus*, North Sea plankton, **Rees**, C. B.; humane killing, **Baker**, J. R.; †*Cancer* sp., **Bernhauser**, A.

*Carcinides maenas*, nitrogen-excretion during early regeneration, **Needham**, A. E.

*Carcinus maenas*, ionic regulation in muscle fibres, **Shaw**, J.; **Shaw**, J. (1); role of 'Y' organ in moulting, **Echallier**, G.; carotenoids in carapace, **Lenel**, R.; hormonal control of water balance, **Carlisle**, D. B. (2); reproduction, habits, **Balss**, H.; brackish-water, **Balss**, H.; larva (photo. Wilson), **Forest**, J. (1).

*Carpilius maculatus*, coloured plate by Sciaoni, **Forest**, J. (1).

*Charybdis japonica*, parasitised by *Heterosaccus papillosus*, modified external characters, etc., **Matsumoto**, K.

*Chlorodiella niger*, figd., **Barnard**, K. H. (4).

*Cryptochirus dimorphus*, reproduction, dimorph., fig., **Balss**, H.

*Cymo deaossyi*, figd., **Barnard**, K. H. (4).

*Cymopolia whitei*, parasitised by *Sacculina loricata*, q.v., **Boschma**, H. (2).

Deckeniidae fam. nov. p. 219, *Deckenia imitatrix*, *D. mitis*, figs., key to spp., etc., W. Africa. Ann. Mus. Congo belg. Zool. (3) III 1 1955 : **Bott**, R. (1).

*Dissodactylus meyerabichi* sp. nov. p. 61, *D. nitidis*, figd., El Salvador. Senckenbergiana, Biol. 36 1-2 1955 : **Bott**, R. (2).

*Eriocheir sinensis*, reproduction habits, fig., **Balss**, H.; *E. japonicus*, chromatophoretropic activity of neurosecretory cells, etc., figs., **Matsumoto**, K. (1); electrical study of compound eye, **Konishi**, J.

*Gecarcinus lateralis*, neurosecretion, sinus gland, figs., **Gabe**, M.

*Geryon tridens*, photo., discussed, **Dieuzeide**, R.

*Glyptograpsus impressus*, figd., **Holthuis**, L. B.

Grapsidae : faunal differentiation; auditory and visual signalling, etc. fig., **Tweedie**, M. W. F.

*Grapsus grapsus*, osmoregulation, **Gross**, W. J.

*Homalaspis* A. M. Edw. 1803, proposed validation, **Hemming**, F. (2).

*Hymenosoma orbiculare*, breeding and growth, figs., **Broekhuysen**, G. J.

*Ilyograpsus* p. 25, gen. nov. (Grapsidae) for *I. rhizophorae* p. 27, sp. nov. S. Africa, figs. Ann. S. Afr. Mus. 43 1 1955 : **Barnard**, K. H. (4).

*Liberonautes* p. 306, gen. nov., *L. latidactylus*, figd., Africa. Ann. Mus. Congo belg. Zool. (3) 111 1 1955 : **Bott**, R. (1).

*Macrophthalmus*, key to S. African species (revised), **Barnard**, K. H. (4).

*Macropipus parvulus*, described, *M. pusillus*, figd., **Zariquiey**, A. (4).

*Metopocarcinus truncatus*, figd., **Holthuis**, L. B.

†*Necrocarcinus tricarinatus*, fig., **Via**, L.

†*Neptunus granulatus*, figs., **Veiga Ferreira**, O. da; *N. pelagicus*, coloured plate by Sciaoni, **Forest**, J. (1).

*Ocypode* sp., osmoregulation, **Gross**, W. J.

Ocypodidae, anatomy, morphology, ecology behaviour, etc., El Salvador, many figs. **Peters**, H. M.

*Pachygrapsus crassipes*, ionic and osmotic concentration in blood and urine, **Prosser**, C. L., **Green**, J. W. & **Chow**, J.; osmoregulation, **Gross**, W. J.

*Panopeus convexus minor*, sub. sp. nov. p. 57, figs., El Salvador. Senckenbergiana, Biol. 36 1-2 1955 : **Bott**, R. (2).

*Paracleistostoma fossula* p. 24, sp. nov. S. Africa, figd., Ann. S. Afr. Mus. 43 1 1955 : **Barnard**, K. H. (4).

*Paragalene longicirura*, figs., notes, etc., **Dieuzeide**, R. & **Goëau-Brissonnière**, W.

*Paratelphusa guerini*, control methods, natural history, etc., **Ali, J. A.**; blood plasma, **Rangnekar, P. V.**; amino acids, **Rangnekar, P. V.** (1); *P. hydrodromus*, succinic dehydrogenase in neurosecretory cells, **Nayar, K. K.** & **Parameswaran, R.**; neurosecretory cells, **Parameswaran, R.**

*Pilumnopus indica*, figd., **Barnard, K. H.** (4).

*Pinnixa petersi* p. 58, *P. salvadorensis* p. 59, **spp. nov.** figs., El Salvador, Seckenbergiana, **Biol. 36** 1-2 1955: **Bott, R.** (2); *P. penultipedalis*, figd., **Barnard, K. H.** (4).

*Podophthalmus vigil*, photo. by Sciaoni, **Forest, J.** (1).

*Portunus latipes*, figd., **Prud'homme van Reine, W. J.**

*Portunus* sp., North Sea Plankton, **Rees, C. B.**

*Potamon*, male with ovotestis, figs., discussion, **Matsumoto, K.** (2); *P. dehaani*, eye-stalk extract—effect on growth of *Avena*, **Otsu, T.** & **Hanaoka, K. I.**; *P. edulis*, biology and physiology, **Biancamaria, E.**; *P. potamios*, figs., land habitat, **Balss, H.**

*Potamonautes (Erimetopus) brazzae brazzae*, *P. (E.) brazzae frontospinulosa*, p. 225 **sub. sp. nov.** Congo, *P. (Platythelphusa) armata armata*, *P. (P.) armata conculata*, *P. (Platypotamonautes)* p. 229, **sub. gen. nov.**, *P. (P.) margaritarii*, *P. (P.) platynotus*, *P. (P.) ecorseii*, *P. (P.) pilosus*, *P. (P.) neumanni*, *P. (Longipotamonautes)* **sub. gen. nov.** p. 239, *P. (L.) vandenbrandeni*, *P. (L.) schubotzi*, *P. (L.) paecilei*, *P. (L.) punctatus* p. 243, **sp. nov.**, *P. (L.) ballayi*, *P. (L.) ballayi adentatus* p. 245, **sub. sp. nov.**, *P. (L.) ballayi acristatus* p. 246, **sub. sp. nov.**, *P. (Isopotamonautes)* p. 247, **sub. gen. nov.**, *P. (I.) anchietae*, *P. (I.) macrobrachii*, *P. (Potamonautes) warreni*, *P. (P.) bayonianus bayonianus*, *P. (P.) bayonianus dubius*, *P. (P.) perlatus*, *P. (Obesopotamonautes)* **sub. gen. nov.** p. 256, *P. (O.) langi*, *P. (O.) obesus obesus*, *P. (O.) obesus calcaratus*, *P. (Acanthothelphusa) niloticus*, *P. (Gerdalopotamonautes)* **sub. gen. nov.** p. 261, *P. (G.) gerdalensis* **sp. nov.** p. 262, E. Africa, *P. (Tripotamonautes)* p.

262, **sub. gen. nov.**, *P. (T.) loveridgei*, *P. (T.) walderi*, *P. (Lirrangopotamonautes)* p. 264, **sub. gen. nov.**, *P. (L.) johnstoni johnstoni*, *P. (L.) johnstoni platycentron*, *P. (L.) lirrangensis*, *P. (Acropotamonautes)* p. 270, **sub. gen. nov.**, *P. (A.) suprasulcatus suprasulcatus*, *P. (A.) suprasulcatus alluaudi*, *P. (A.) bipartitus*, *P. (Orthopotamonautes)* p. 274, **sub. gen. nov.**, *P. (O.) depressus depressus*, *P. (O.) depressus dybowskii*, *P. (O.) sidneyi*, *P. (Lobopotamonautes)* p. 279, **sub. gen. nov.**, *P. (L.) stanleyensis*, *P. (L.) aloysiisabaudiae*, *P. (L.) perparvus perparvus*, *P. (L.) perparvus minor* p. 284, *P. (L.) perparvus gonocristatus* p. 285, **sub. spp. nov.** Belg. Congo, *P. (Rotundopotamonautes)* p. 286, **sub. gen. nov.**, *P. (R.) granviki*, *P. (R.) berardi berardi*, *P. (R.) berardi ignestii*, *P. (R.) emini emini*, *P. (R.) emini semilunaris* p. 291, **sub. sp. nov.**, *P. (R.) loashiensis* **sp. nov.** p. 292, Congo, *P. (R.) infravallatus*, *P. (R.) didieri*, all figd., Africa, keys to subgenera and species, photos., etc., **Ann. Mus. Congo belg. Zool.** (3) 111 1 1955: **Bott, R.** (1).

Potamonidae, Africa, keys, figs., many new genera and species, synonyms, etc., **Bott, R.** (1).

*Ptychognathus hachijoensis* p. 199, **sp. nov.** Hachijo Island, figs., **Rec. oceanogr. Wks. Japan** 2 1 1955: **Sakai, T.** (1).

*Rhithropanopeus harrisi tridentatus* Black Sea, figs., compared, etc., **Băcesu, M.**; figs., **Prud'homme van Reine, W. J.**

*Sarmatium crassum*, figd., **Barnard, K. H.** (4).

†*Scilla* sp., figs., **Veiga Ferreira, O. da.**

*Sesarma africanum*, control with BHC, **Jordan, H. D.**; *S. (Holometopus) tampicense*, *S. (Holometopus) angustum*, figd., El Salvador, **Bott, R.** (2).

*Sphaerozius fornasinii*, figd., key, **Barnard, K. H.** (4).

*Sudamonautes* **gen. nov.** p. 295 (Potamonidae), *S. (Sudamonautes)* **sub. gen. nov.** p. 296, *S. (S.) africanus africanus*, *S. (S.) africanus chaperi*, *S. (S.) africanus chavanesii*, *S. (S.) decazei decazei*, *S. (S.) decazei orthostylis* p. 301, **sub. sp. nov.** Cameroons, *S. (Convexonautes)* p. 302, **sub. gen. nov.**, *S. (C.)*



*aubryi aubryi*, S. (C.) *aubryi floweri*, S. (C.) *aubryi monodi*, all figd., keys, etc., Africa, Ann. Mus. Congo belg. Zool. (3) 111 1 1955 : **Bott, R. (1).**

*Telmessus cheiragonus*, pericardial organs, figs., **Miyawaki, M. (1)** ; neurosecretory cells, **Miyawaki, M.**

*Thalamita crenata*, Rhizocephalan parasites, **Boschma, H. (1).**

*Thia polita*, North Sea plankton, **Rees, C. B.**

*Trichodactylus petropolitanus*, walking activity rhythm, **Valente, D. & Edwards, G. A.**

*Typhlocarcinodes piroculatus*, figd., **Barnard, K. H. (4).**

*Uca*, sex dimorph., habits, etc., fig., **Balss, H.** ; study of physiology, behaviour, ecology, etc., on Indian species, photos. and diagrams, **Altevoigt, R. (2)** ; displacement activities, **Gordon, H. R. S.** ; *U. dubia*, chromatophore activator in central nervous system, figs., **Enami, M.** ; **Enami, M. (1)** ; *U. marionis nitidus*, *U. annulipes*, biotope studies, habitat, behaviour, territory, copulation, etc., figs., **Altevoigt, R. (1)** ; *U. (Minuca) galapagensis herradurensis*, *U. (Minuca) macrodactyla glabromana*, **sub. spp. nov.** *U. (Minuca) leptochela*, **sp. nov.** p. 431, listed, morphological and ecological study, El Salvador, other species mentioned, **Peters, H. M.** ; *U. pugilator*, heat death—time temp. relationships, **Orr, P. R.** ; *U. pugnax*, rhythms, solar and lunar, **Brown, F. A., Webb, H. M. & Bennett, M. F.**

*Varuna*, proposed use of the plenary powers to determine for the generic name "Varuna" Milne Edw. (H.) 1830 . . . . a gender in harmony with accustomed usage, **Hemming, F.**

*Xantho couchi*, photo., **Dieuzeide, R.**

†*Xanthopsis leachi*, London clay, **Brown, M. M. & Castell, C. P.**

*Xenophthalmodes brachyphallus* p. 34, **sp. nov.** S. Africa, figd., Ann. S. Afr. Mus. 43 1 1955 : **Barnard, (4)**

#### OXYRHYNCHA

*Achaeus gordonae* p. 68, **sp. nov.** *A. cranchi*, Mediterranean, figd., Publ. Inst. Biol. apl. Barcelona 20 1955 : **Forest & Zariquiey, R. A.**

*Anamathia rissoana*, photo., note, **Dieuzeide, R.**

*Chionoectes opilio*, neurosecretion of thoracic ganglion, figs., **Matsumoto, K. (3)** ; neurosecretion of brain, figs., **Matsumoto, K. (4).**

*Cyphocarcinus capreolus*, figd., **Barnard, K. H. (4).**

*Hymenosoma orbiculare*, figd., **Barnard, K. H. (4).**

*Inachus scorbio*, sex dimorph., fig., etc., **Balss, H.**

*Menaethiops natalensis*, *M. delagoae* p. 13, **spp. nov.** S. Africa, *M. fascicularis*, figs., Ann. S. Afr. Mus. 43 1 1955 : **Barnard (4).**

*Paratymolus pubescens*, figd., **Barnard, K. H. (4).**

*Platymaja alcocki*, photo., benthic **Balss, H.**

*Rochinia (Scyramathia) carpenteri* fig., note, **Dieuzeide, R.**

#### OXYSTOMATA

†*Calappa heberti*, figs., **Veiga Ferreira, O. da.**

*Cryptocnemus holdsworthi*, figd., **Barnard, K. H. (4).**

*Ebalia agglomus*, p. 39, **sp. nov.** S. Africa, figd., Ann. S. Afr. Mus. 43 1 1955 : **Barnard, K. H. (4).**

*Favus*, Lanchester 1900, validation of generic name (validation of erroneous entry on "official list"), **Direction 25.**

*Iphiculus spongiosus*, figd., Indo-Pacific, **Serene, R.**

*Iphis*, Leach 1817, proposed validation of, and suppression of *Iphis* Meigen 1800, **Hemming, F. (1).**

Leucosiidae, circulation of water through eggs, etc., **Drach, P.**

*Merocryptus durandi* **sp. nov.** p. 146, *M. lambriformis*, *M. boletifer*, Indo-Pacific, all figd., Treubia 23 1955 : **Serene, R.**

*Myra fugax*, *M. pentacantha*, *M. kessleri*, all figd., other sp. mentioned, Indo-Pacific, **Serene, R.**

*Myrodes eudactylus*, figs., Indo-Pacific, **Serene, R.**

*Nucia tuberculosa*, *N. bowieri*, *N. modesta*, *N. speciosa*, *N. puchella*, *N. (pfefferi) speciosa*, key, figs., Indo-Pacific, other species mentioned, etc., **Seréne, R.**

† *Tymolus* sp., fig., **Shikama, T.**

## GYMNOPLEURA

[No record]

## DROMIACEA

† *Gryptocarcinus texanus* (Dynomenidae), **Remy, J. M.**

*Latreillopsis petterdi*, *N. Zealand*, figs., **Dell, R. K.**

*Pseudodromia integrifrons*, figd., **Barnard, K. H. (4).**

## Anomura

Anomura, Argentina, **Ringuelet, R. A.**; Chile, **Haig, J.**

## PAGURIDEA

Paguridae, Vietnam, distribution, etc., taxonomy, **Fize, A. & Seréne, R.**

*Anapagurus chiroacanthus*, *A. curvidactylus*, *A. curvidactylus* var. *A. laevis*, figd., **Forest, J.**; *A. laevis*, *A. chiroacanthus*, colour descriptions, **Zariquiey, A. (2).**

*Birgus latro*, osmoregulation, **Gross, W. J.**

*Calcinus herbsti*, *C. gaimardi*, *C. latens*, all figd., key to spp., descrip., etc., Vietnam, **Fize, A. & Seréne, R.**

*Catapaguroides timidus*, colour description, **Zariquiey, A. (2).**

*Clibanarius africanus*, figd., **Forest, J.**; *C. panamensis*, figd., El Salvador, **Bott, R. (2)**; *C. sachalinicus*, **sp. nov.** Mordvinov Straits, S.E. Sakhalin, Trav. Inst. zool. Acad. Sci. URSS. **18** 1955 241; **Kobyakova, Z. I.**; *C. infraspinatus*, *C. longitarsus*, *C. striolatus*, *C. lineatus*, *C. arethusa*, *C. eurysternus*, *C. cruentatus*, *C. snelli*, *C. corallinus*, *C. virescens*, *C. merguensis*, *C. ransonii*, also several *Clibanarius* spp. figd., descrip., keys, etc., Vietnam, **Fize, A. & Seréne, R.**

*Coenobita clypeata*, *C. rugosa*, *C. perlata*, *C. cavipes*, all figured and descr., Key to spp., Vietnam, **Fize, A. & Seréne,**

**R.**; *C. rugosa*, figd., El Salvador, **Bott, R. (2)**; *Coenobita*, land habitat, fig., **Balss, H.**; osmoregulation, **Gross, W. J.**

*Dardanus arrosor*, distrib. discussed, etc., *D. pectinatus*, figd., **Forest, J.**; *Dardanus*, nomenclature, **Walton, B. C. & Stevens, B. A.**

*Diogenes denticulatus*, *D. mercatoris*, *D. ovatus*, *D. pugilator*, figd., **Forest, J.**

*Eupagurus*, nomenclature, **Walton, B. C. & Stevens, B. A.**; *E. alatus*, *E. cuanensis*, *E. mbizi* p. 116, **sp. nov.**, *E. pubescentulus*, *E. pycnacanthus* p. 122, **sp. nov.**, *E. triangularis*, all figd., W. African coast, Rés. Scient. Expéd. Océanogr. Belg. Eaux Côt. Afr. **3** 4 1955; **Forest, J.**; *E. bernhardus*, North Sea plankton, **Rees, C.-B.**; *E. ochotensis*, parasitised by *Peltogasterella socialis*, **Oguro, C.**

*Lithodes hystrix*, photo. by Sciaoni, **Forest, J. (1).**

*Ostraconotus spatulipes*, fig., brackish water, **Balss, H.**

*Paguristes fagei*, *P. hispidus*, *P. mauritanicus*, *P. microphthalmus*, *P. virilis*, all figd., **Forest, J.**; † *P. aff. chipolensis*, fig., **Veiga Ferreira, O. da**

*Pagurus*, application for decision regarding status of name, etc., **Forest, J. & Holthuis, L. B.**; rejection of *Pagurus* Fabr., 1775 and *Pagurus* Latr., 1803; for *Eupagurus* Brandt 1851 and *Dardanus* Paulson 1875, **Dollfus, R.**; nomenclature, **Walton, B. C. & Stevens, B. A.**; † *P. avellanadae* p. 171, **sp. nov.** Cretaceous, figs., An. Esc. Perit. Agric. Barcelona **10** 1951; **Via, L.**; † *P. bathonicus* **sp. nov.** p. 160, Bull. Mus. Hist. nat. Paris (2) **27** 1955; **Remy, J. M.**; *P. edwardsi*, *P. perlatus*, photos., **Haig, J.**; *P. megistos*, *P. sanguinolentus*, *P. guttatus*, *P. setifer*, *P. scutellatus*, *P. wood-masoni*, *P. deformis*, *P. haami*, *P. hessi*, *P. imbricatus*, all figd., descrip. Key, Vietnam, **Fize, A. & Seréne, R.**; *P. sculptimanus*, *P. cuanensis*, *P. prideauxi*, *P. anachoretus*, colour, descrip., **Zariquiey, A. (2)**; † *P. sp.*, fig., **Veiga Ferreira, O. da.**

*Paralithodes brevipes*, pericardial organs, figs., **Miyawaki, M. (1).**

*Parapagurus macrocerus* p. 101, **sp. nov.** W. Africa, *P. gracilipes*, figs., Rés. Scient. Expéd. Océanogr. Belg. Eaux Côt. Afr., **3** 4 1955; **Forest, J.**

*Petrochirus granulatus californiensis* figd., El Salvador, **Bott, R. (2)**; †*P.*, aff. *inequalis*, fig., **Veiga Ferreira, O. da**; *P. pustulatus*, figd., **Forest, J.**

*Tylaspis anomala*, figs., benthic, **Balss H.**

*Trizopagurus caparti*, figd., **Forest, J.**

#### HIPPIDEA

*Albunea lucasin*, figd., El Salvador, **Bott, R. (2)**.

*Blepharipoda spinimana*, photo., **Haig, J.**

*Hippa pacific*, feeding habits, etc., **Matthews, D. C.**

*Lepidopa deamae*, figd., El Salvador, **Bott, R. (2)**.

#### THALASSINIDEA

*Axiu acanthus* var. *mauritanus*, figd., Comoro Ids., **Fourmanoir, P.**

†*Callianassa lusitanica* **sp. nov.** p. 57, figs., Miocene, Portugal, *C. heberti*, *C. aff. prisca*, *C. aff. faujasi*, figs., **Comun. Serv. geol. Portug. 35** 1954 : **Veiga Ferreira, O. da**; †*C. infracetacea*, *C. faujasi*, *C. cfr. michelotti*, figd., **Via, L.**; *C. seilacheri* **sp. nov.** p. 47, El Salvador, *C. eiseni*, figd., **Senckenbergiana, Biol. 36** 1-2 1955 : **Bott, R. (2)**; *C. subterranea*, *C. helgolandica*, North Sea plankton, **Rees, C.-B.**; †*C. sp. aff. inornata*, fig., **Shikama, T.**; *Callianassa* sp., figd., Comoro Ids., **Fourmanoir, P.**

*Calocarides coronatus*, distribution and notes, **Christiansen, E. N.**

*Calocaris macandreae*, N. Norway, notes, etc., **Soot-Ryen, T.**

*Upogebia deltaura*, etc., North Sea plankton, **Rees, C. B.**; *U. rostrospinoso* **sp. nov.** p. 49, El Salvador, figd., **Senckenbergiana, Biol. 36** 1-2 1955 : **Bott, R. (2)**.

#### GALATHEIDEA

*Aegla franca*, geographical distrib. and biometric study, parasites, figs., etc., S. America, **Williamson, S. L. & Fontes, C. M.**; *A. papudo*, photo., **Haig, J.**

*Cervimunida johni*, photo., **Haig, J.**

*Galathea lenzi*, photo., **Haig, J.**; *G. strigosa*, larva, plate, **Wilson, Forest,**

**J. (1)**; *Galathea* sp., North Sea plankton, **Rees, C. B.**

*Munida gregaria*, *M. subrugosa*, photos., **Haig, J.**; *M. iris rutilanti*, parasitised by Bopyrid, effect on sexual characters, figs., **Délye, G.**

*Munidopsis crassa*, describ., fig., compared, etc., **Gordon, I. (1)**.

*Petrolisthes punctatus*, *P. affinis*, *P. acanthophorus*, photos., **Haig, J.**; *P. virgatus*, figd., **Barnard, K. H. (4)**.

*Pleuoncodes monodon*, photo., **Haig, J.**

*Porcellana delagoae*, p. 40, **sp. nov.** S. Africa, figd., **Ann. S. Afr. Mus. 43** 1 1955 : **Barnard, K. H. (4)**; *P. longicornis*, North Sea plankton, **Rees, C. B.**

#### Astacura

Crayfish—cyclic dimorphism in females, **Hobbs, H. H. (1)**; electron microscope observations on median-to-motor giant synapse, figs., **Robertson, J. D.**; serology, **Pryor, C. W.**; Extirpation of eyestalk and effect on ecdysis and testicular behaviour, **Telford, S. R., Lewis, W. H. & Kayan, J. B.**; new records Indiana and distribution, **Eberly, W. R.**

Lobsters, observations on the recaptures of tagged Lobsters in Scotland, **Thomas, H. J. (1)**; Lobster and spiny lobster—bibliography, **Dawson, C. E.**; Lobster, proteins purified from nerve extract, **Maxfield, M. & Hartley, R. W.**

*Astacus*, validation under the plenary powers of the generic name "*Astacus*" **Fabr. 1775 . . . .** (correct, of an erroneous entry made in the "Official List of generic names in Zoology" by the ruling given in "Opinion" 104, **Direction 12**; nomenclature, **Opinion 332**; *A. fluviatilis*, study on nerve impulse origin in muscle, figs., etc., **Florey, E.**

*Cambarellus shufeldtii*, factors influencing rate of oxygen consumption, **Fingerman, M.**

*Cambarus affinis*, reproduct., figs., **Balss, H.**; nervous system in 'gnathale' region and 'paragnathus' discussed, **Chaudonneret, J.**; *C. clarkii*, electrocardiogram, **Ozawa, T.**; **Takesige, T., Unno, H. & Kudo, V.**; *C. cristatus* p. 95, **sp. nov.** Mississippi,



Proc. biol. Soc. Wash. **68** 1955 : figs., **Hobbs**, H. H. ; *C. dissitus* p. 73, **sp. nov.** N. Louisiana, Tulane Stud. zool. **3** 4 1955 : figs., **Penn**, G. H. ; *C. longulus longulus*, effects of eyestalk extirpation on female, **Zipf**, E. M. ; monoecious tendencies, figs., **Lewis**, W. H. ; *C. virilis*, induction of moulting, **Stephens**, G. C.

†*Enoploclytia walkeri schmidtii* p. 445, **var. nov.** Texas, Upper Albian (Cretaceous), fig., Fieldiana, Zool. **37** 1955 : **Richardson**, E. S.

*Homarus* Weber 1795, proposed revision (nomenclature), **Hemming**, F. (4) ; nomenclature, **Hemming**, F. (3) ; *H. americanus*, ganglion activity, figs., **Maynard**, D. M. ; †*H. (Hoploparia)* cfr. *dentatus*, *H. (Hoploparia)* *edwardsi*, *H. (Hoploparia)* cfr. *pelsenerii*, figs., **Via**, L. ; *H. vulgaris*, function differences of adductor muscle contraction, **Wiersma**, C. A. G. ; sex ratio and mortality rates, **Thomas**, H. ; size, shape and hydration of hemocyanin, **Lauffer**, M. A. & **Swaby**, L. G.

*Nephrops norvegicus*, distrib., biol., exploitation in Scottish waters, **Thomas**, H. (2).

†*Oncoporeia (Hoploparia)* *granulosa*, photo., **Via**, L.

*Orconectes rusticus*, loss and gain of heat tolerance, **Spoor**, W. A.

*Potamobius astacus*, coloured plate, biology, etc., **Ruhmer**, K. ; *P. astacus*, *P. leptodactylus*, distrib., structure and functions of cement glands, figs., **Malaczynska-Suchcitz**, Z.

*Procambarus clarkii*, development of testes, figs., **Sukô**, T.

Tokyo Univ. Fish **41** 1955 : photos., **Kubo**, I. (1).

*Palinurus mauritanicus*, *P. vulgaris*, figd., discussed, etc., **Dieuzeide**, R. ; *P. vulgaris*, eyestalk movements, photo., **Dijkgraaf**, S. ; growth and ecology, Adriatic, **Gamulin**, T. ; coloured plate by Sciaoni, **Forest**, J. (1) ; sound production, photogr., **Dijkgraaf**, S. (1).

*Panulirus argus*, moulting cycle, etc., figs., **Travis**, D. F. ; moulting cycle—physiol. changes in blood and urine, figs., **Travis**, D. F. (2) ; *P. interruptus*, ganglion activity, figs., **Maynard**, D. M. ; growth, population dynamics, field behaviour, etc., photos., **Lindberg**, R. G. ; *P. japonicus*, discharges of ganglionic trunk of heart, figs., **Matsui**, K. (1) ; electrocardiogram, **Matsui**, K. ; retinal and optic nerve response, figs., **Konishi**, J. (1) ; *P. baessleri*, figd., El Salvador, **Bott**, R. (2) ; *P. polyphagus*, central nervous system, figs., **George**, C. J., **Reuben**, N. & **Muthe**, P. T. ; digestive system, figs., **George**, C. J., **Reuben**, N. & **Muthe**, P. T. (1) ; trunk muscles, **George**, C. J., **Reuben**, N. & **Muthe**, P. T. (2) ; pericardial membrane, its role in circulation, **George**, C. J., **Nair**, K. K. & **Muthe**, P. T. ; amino-acids in blood, **Rangnekar**, P. V. (1) ; study of blood plasma, **Rangnekar**, P. V. ; *Panulirus* sp., photo., Red Sea, **Stella**, E.

*Parribacus* (error for *Parribacus*) *ursus-major*, first larvae, fig., describ., **Aikawa**, H. & **Isobe**, K.

*Scylla serrata*, study of blood plasma, **Rangnekar**, P. V. ; amino-acids in blood, **Rangnekar**, P. V. (1).

## Palinura

### SCYLLARIDEA

Scyllaridea, Nutritive capacity of blood of some crust. and molluscs, **Rangnekar**, P. V. (2) ; N. Zealand waters, **Dell**, R. K.

*Evivacus princeps*, figd., El Salvador, **Bott**, R. (2).

†*Linuparus scyllariformis*, London Clay, **Brown**, M. M. & **Castell**, C. P.

*Nupalirus* **gen. nov.** for *N. japonicus* **sp. nov.** p. 186, Japanese waters, J.

## NATANTIA

### STENOPIDEA

Stenopidea—Keys to determination of recent genera, **Holthuis**, L. B. (2).

*Engystenopus palmipes*, figd., **Holthuis**, L. B. (2).

*Microprosthemum validum*, figd., **Holthuis**, L. B. (2).

*Odontozona spongicola*, figd., **Holthuis**, L. B. (2).

*Richardina spinicincta*, figd., **Holthuis**, L. B. (2).

*Spongicola venusta*, figd., **Holthuis**, L. B. (2).

*Spongicoloides inermis*, figd., **Holthuis**, L. B. (2).

*Stenopus hispidus*, figd., **Holthuis**, L. B. (2).

# EUCYPHIDEA (= CARIDEA)

Caridea, Mediterranean, bottom fauna, **Dieuzeide**, R.; Cumbrae, **Clark**, R. B. & **Milne**, A.; Marshall Isds., **Chace**, F. A., Jr.; Singapore, **Kow**, Ah. T.; Proposed addition to the "Official List of generic names in Zoology" of the names of one hundred and two genera of caridea..., **Holthuis**, L. B. (1); Keys to determination of recent genera, **Holthuis**, L. B. (2).

Caridea, attachment of eggs, many species, figs., **Yonge**, C. M.; luminescence and photophores, figs., **Denne**, R.; deep sea, **Dahl**, E. (4).

*Acanthephyra pulchra*, a synonym of *A. eximia*, figd., **Holthuis**, L. B. (4); *A. purpurea*, figs., **Holthuis**, L. B. (2).

*Alope*, White, 1847, recommended for addition to "Official list", **Holthuis**, L. B. (1); *A. orientalis*, figd., **Holthuis**, L. B. (2).

Alpheidae—Key to genera, **Holthuis**, L. B. (2); Alpheid A, post larva fig., **Pillai**, N. K.

*Alpheopsis equalis truncatus*, figd., **Holthuis**, L. B. (2).

*Alpheus bullatus* p. 45, **sp. nov.** S. Africa, figs., Ann. S. Afr. Mus. 43 1 1955: **Barnard**, K. H.; *A. glaber*, figd., **Holthuis**, L. B. (2); *A. pacificus*, post larvae, fig., **Pillai**, N. K.

*Amphibetaeus jousseaumei*, figd., **Holthuis**, L. B. (2).

*Anchistioides*, Paulson, 1875, recommended for addition to "Official List", **Holthuis**, L. B. (1); *A. willeyi*, figd., **Holthuis**, L. B. (2).

*Anchistus* Borradaile 1898, recommended for addition to "Official List", **Holthuis**, L. B. (1); *A. custos*, figd., **Holthuis**, L. B. (2).

*Antecaridina lavensis*, figd., **Holthuis**, L. B. (2).

†*Anthrpalaeon dubius*, fig., **Paproth**, E. & **Schmidt**, W.

*Arete* Stimpson, 1860, recommended for addition to "Official List", **Holthuis**, L. B. (1); *A. dorsalis*, figd., **Holthuis**, L. B. (2).

*Aretopsis amabilis*, figd., **Holthuis**, L. B. (2).

*Argis* Kröyer, 1842, recommended for addition to "Official List", **Holthuis**, L. B. (1); *A. toyamaensis*, figd., **Holthuis**, L. B. (2).

*Athanas* Leach, 1814, recommended for addition to "Official List", **Holthuis**, L. B. (1); *A. marshallensis*, p. 17, **sp. nov.** Marshall Isds., figd., Proc. U.S. nat. Mus. No. 3349 1956: **Chace**, F. A., Jr.; *A. nitescens*, figd., **Holthuis**, L. B. (2).

*Athanopsis platyrhynchus*, figd., **Holthuis**, L. B. (2).

*Atya* Leach, 1816, recommended for addition to "Official List", **Holthuis**, L. B. (1); *A. crassa*, figd., **Holthuis**, L. B. (2); fig., fresh water, **Balss**, H.; *A. ortmannioides*, p. 459, **sp. nov.** Mexico, figs., An. Inst. Biol. Mex. 26 2 1955: **Villalobos**, F. A.

*Atyaephyra desmaresti*, life cycle, figs., **Vorstman**, A. G.; figd., **Holthuis**, L. B. (2).

*Atyella* Calman, 1906, recommended for addition to "Official List", **Holthuis**, L. B. (1); *A. brevirostris*, figd., **Holthuis**, L. B. (2).

Atyidae De Haan, 1849, recommended for addition to "Official List", **Holthuis**, L. B. (1); Key to genera, **Holthuis**, L. B. (2); Mexico, **Villalobos**, F. A.

*Austropandalus grayi*, figd., **Holthuis**, L. B. (2).

*Automate anacanthopus*, figd., **Holthuis**, L. B. (2); *A. johnsoni*, p. 13, **sp. nov.** Marshall Isds., Proc. U.S. nat. Mus. No. 3349 1955: **Chace**, F. A., Jr.; *Automate* De Man, 1888, recommended for addition to "Official List", **Holthuis**, L. B. (1).

*Balssia* Kemp, 1922, recommended for addition to "Official List", **Holthuis**, L. B. (1); *B. gasti*, figd., **Holthuis**, L. B. (2).

*Barbouria* Rathbun, 1912, recommended for addition to "Official List", **Holthuis**, L. B. (1); *B. cubensis*, figd., **Holthuis**, L. B. (2).

*Batella parvimanus*, figd., **Holthuis**, L. B. (2).

*Bathypalaemonella* Balss, 1914, recommended for addition to "Official List", **Holthuis**, L. B. (1); *B. zimмери*, figd., **Holthuis**, L. B. (2).

*Betaeus* Dana, 1852, recommended for addition to "Official List", **Holthuis**, L. B. (1); *B. truncatus*, figd., **Holthuis**, L. B. (2).

*Birulia* Brashnikov, 1903, recommended for addition to "Official List", **Holthuis**, L. B. (1); *B. kishinouyui*, figd., **Holthuis**, L. B. (2).

*Brachycarpus* Bate, 1888, recommended for addition to "Official List", **Holthuis**, L. B. (1); *B. biunguiculatus*, figd., **Holthuis**, L. B. (2).

*Bresilia* Calman, 1896, recommended for addition to "Official List", **Holthuis**, L. B. (1); *B. atlantica*, figd., **Holthuis**, L. B. (2).

Bresiliidae, Calman, 1896, recommended for addition to "Official List", **Holthuis**, L. B. (1); Key to genera, **Holthuis**, L. B. (2).

*Bythocaris* Sars, 1870, recommended for addition to "Official List", **Holthuis**, L. B. (1); *B. leucopis*, figd., **Holthuis**, L. B. (2).

Campylonotidae, Sollaud, 1913, recommended for addition to "Official List", **Holthuis**, L. B. (1); Key to genera, **Holthuis**, L. B. (2).

*Campylonotus* Bate, 1888, recommended for addition to "Official List", **Holthuis**, L. B. (1); *C. rathbunae*, figd., **Holthuis**, L. B. (2).

*Caridella* Calman, 1906, recommended for addition to "Official List", **Holthuis**, L. B. (1); *C. cunningtoni*, figd., **Holthuis**, L. B. (2).

*Caridina*, Milne Edwards, 1837, recommended for addition to "Official List", **Holthuis**, L. B. (1); *C. acuminata*, figd., **Holthuis**, L. B. (2); *C. lovoensis* p. 197, **sp. nov.** Belg. Congo, figs., Rev. Zool. Bot. afr. 51 1955: **Roth-Woltereck**, E.

*Caridinides wilkinsi*, figd., **Holthuis**, L. B. (2).

*Caridinopsis chevalieri*, figd., **Holthuis**, L. B. (2).

*Caridion* Goës, 1863, recommended for addition to "Official List", **Holthuis**, L. B. (1); *C. gordonii*, figd., **Holthuis**, L. B. (2).

*Cavicheles kempi*, figd., **Holthuis**, L. B. (2).

*Chlorocurtis* Kemp, 1925, recommended for addition to "Official List", **Holthuis**, L. B. (1); *C. jactans*, figd., **Holthuis**, L. B. (2).

*Chlorotocella* Balss, 1914, recommended for addition to "Official List", **Holthuis**, L. B. (1); *C. gracilis*, figd., **Holthuis**, L. B. (2).

*Chlorotocoides* Kemp, 1925, recommended for addition to "Official List", **Holthuis**, L. B. (1); *C. spinicauda*, figd., **Holthuis**, L. B. (2).

*Chlorotocus* Milne Edwards, recommended for addition to "Official List", **Holthuis**, L. B. (1); *C. novae-zealandiae*, figd., **Holthuis**, L. B. (2).

*Chorismus* Bate, 1888, recommended for addition to "Official List", **Holthuis**, L. B. (1); *C. antarcticus*, figd., **Holthuis**, L. B. (2).

*Conchodytes meleagrinae*, attachment of eggs, figs., Yonge, C. M.; *C. monodactylus*, figd., **Holthuis**, L. B. (2).

*Coralliocaris* Stimpson, 1860, recommended for addition to "Official List", **Holthuis**, L. B. (1); *C. superba*, figd., **Holthuis**, L. B. (2); *Coralliocaris* sp., figd., Comoro Ids., **Fourmanoir**, P.

*Coutiereia* Nobili, 1901, recommended for addition to "Official List", **Holthuis**, L. B. (1); *C. agassizi*, figd., **Holthuis**, L. B. (2).

Crangonidae—Key to genera, **Holthuis**, L. B. (2).

*Crangon crangon*, figd., **Holthuis**, L. B. (2); *C. vulgaris*, attachment of eggs in this species and in other caridea, many figs., **Yonge**, C. M.

*Creaseria morleyi*, figd., **Holthuis**, L. B. (2).

*Cryphiops caementarius*, figd., **Holthuis**, L. B. (2).

*Cryptoches* Sars 1870, recommended for addition to "Official List", **Holthuis**, L. B. (1); *C. pygmaea*, figd., **Holthuis**, L. B. (2).



*Cryptoleander* A and B, larvae, fig., **Pillai, N. K.**

*Dantecia caudani*, figd., **Holthuis, L. B. (2).**

*Dasellas herdmanniae*, figd., **Holthuis, L. B. (2).**

*Dasycaris* Kemp, 1922, recommended for addition to "Official List", **Holthuis, L. B. (1)**; *D. ceratops*, figd., **Holthuis, L. B. (2).**

*Desmocariss* Sollaud 1911 recommended for addition to "Official list", **Holthuis, L. B. (1)**; *D. trispinosa* figs., **Holthuis, L. B. (2).**

*Dichelopandalus* Caullery, 1896, recommended for addition to "Official List", **Holthuis, L. B. (1)**; *D. leptocerus*, figd., **Holthuis, L. B. (2).**

*Discias exul*, figd., **Holthuis, L. B. (2).**

*Dorodotes* Bate, 1888, recommended for addition to "Official List", **Holthuis, L. B. (1)**; *D. reflexus*, figd., **Holthuis, L. B. (2).**

*Drimo elegans* (= *Gnathophyllum elegans*), notes and photos., **Birkholz, J.**

*Dugastella* Bouvier, 1912, recommended for addition to "Official List", **Holthuis, L. B. (1)**; *D. marocana*, figd., **Holthuis, L. B. (2).**

*Ephyrina* Smith, 1885, recommended for addition to "Official List", **Holthuis, L. B. (1)**; *E. hoskyni*, figd., **Holthuis, L. B. (2).**

*Eretmocariss* A and B, larvae, fig., **Pillai, N. K.**

*Eualus bulychewae* p. 238, S. Kurile Straits, *E. lindbergi* p. 240, Okhotsk Sea, S. Sakhalin, **spp. nov.**, Trav. Inst. zool. Acad. Sci. URSS. **18** 1955 : **Kobyakova, Z. I.**; *E. gaimardi*, figd., **Holthuis, L. B. (2).**

Eugonatonatidae Chace, 1937, recommended for addition to "Official List" and proposed use of plenary powers to validate family-group name "Eugonotonatidae" Chace, 1937, **Holthuis, L. B. (1).**

*Eugonatonatus* Schmitt, 1926, recommended for addition to "Official List", **Holthuis, L. B. (1)**; *E. crassus*, figd., **Holthuis, L. B. (2).**

*Eupasiphae latirostris*, figd., **Holthuis, L. B. (2).**

*Euryrhynchella wrzesniowskii* reprod., habits, etc., figs., **Balss, H.**

*Euryrhynchus wrzesniowskii*, figd., **Holthuis, L. B. (2).**

*Fennera chacei*, figd., **Holthuis, L. B. (2).**

*Gelastocaris* Kemp, 1914, recommended for addition to "Official List", **Holthuis, L. B. (1)**; *G. paronae*, figd., **Holthuis, L. B. (2).**

*Glyphocrangon* Milne Edwards, 1887, recommended for addition to "Official List", **Holthuis, L. B. (1)**; *G. dentatus*, figd., **Holthuis, L. B. (2).**

Glyphocrangonidae Smith, 1884, recommended for addition to "Official List", **Holthuis, L. B. (1).**

Gnathophyllinae Dana, 1852, recommended for addition to "Official List", **Holthuis, L. B. (1)**; Key to genera, **Holthuis, L. B. (2).**

*Gnathophyllodes mineri*, figd., **Holthuis, L. B. (2).**

*Gnathophyllum* Latreille, 1819, recommended for addition to "Official List", **Holthuis, L. B. (1)**; proposals for the use of the plenary powers to validate the emendation to "Gnathophyllum" of the generic name, "Gnathophyllum" Latreille, 1814, **Holthuis, L. B. (1)**; *G. panamense*, figd., **Holthuis, L. B. (2).**

*Hamodactylus boschmai*, figd., **Holthuis, L. B. (2).**

*Harpiliopsis depressus*, figd., **Holthuis, L. B. (2).**

*Heptacarpus* Holmes, 1900, recommended for addition to "Official List", **Holthuis, L. B. (1)**; *H. minutus*, figd., **Holthuis, L. B. (2).**

*Heterocarpoides* De Man, 1917, recommended for addition to "Official List", **Holthuis, L. B. (1)**; *H. levicarina*, figd., **Holthuis, L. B. (2).**

*Heterocarpus* Milne Edwards, 1881, recommended for addition to "Official List", **Holthuis, L. B. (1)**; *H. reedi* p. 105, **sp. nov.** Chilian coasts, figs., photos., Invest. zool. chil. **2** 1955 : **Bahamonde, N.**; *H. sibogae*, figd., **Holthuis, L. B. (2).**

*Hippolysmata* Stimpson, 1860, recommended for addition to "Official List", **Holthuis, L. B. (1)**; *H.*

(*Hippolysmata*) *vittata*, *H.* (*Lysmatella*) *prima*, *H.* (*Exhippolysmata*) *ensirostris*, figd., **Holthuis**, L. B. (2); *H. vittata*, post larvae, fig., **Pillai**, N. K.

*Hippolyte* Leach, 1814, recommended for addition to "Official List", **Holthuis**, L. B. (1); *H. varians*, attachment of eggs, figs., **Yonge**, C. M.; figd., **Holthuis**, L. B. (2).

Hippolytidae Bate, 1888, recommended for addition to "Official List" and proposal for use of the plenary powers to validate the family-group name "Hippolytidae" Bate, 1888, **Holthuis**, L. B. (1); Key to genera, **Holthuis**, L. B. (2).

*Hoplophorus grimaldii*, luminescence and photophores, discussed, **Dennell**, R.

*Hymenodora* Sars, 1877, recommended for addition to "Official List", **Holthuis**, L. B. (1); *H. elegans*, figd., **Holthuis**, L. B. (2); *H. gracilis*, figd., **Holthuis**, L. B. (2); luminescence, photophores, etc., fig., **Dennell**, R.

*Jocaste lucina*, figd., **Holthuis**, L. B. (2).

*Latreutes* Stimpson, 1860, recommended as addition to "Official List", **Holthuis**, L. B. (1); *L. mucronatus*, figd., **Holthuis**, L. B. (2).

*Leander serratus*, local variation in colour pattern (British Coasts), figs., **Carlisle**, D. B. (1); paper electrophoresis of pigment activating substances, coloured plates, etc., **Knowles**, G. W., **Carlisle**, D. B. & **Dupont-Raabe**, M.; colour change and moulting relationships, **Scheer**, B. T. & **Scheer**, M. A. Q.; attachment of eggs, figs., **Yonge**, C. M.; *L. tenuipes*, fig., brackish water, **Balss**, H.; *L. urocaridella*, figd., **Holthuis**, L. B. (2); *Leander* A, B and C, larvae figured, **Pillai**, N. K.

*Leandrites celebensis*, figd., **Holthuis**, L. B. (2).

*Lebbeus polaris*, figd., **Holthuis**, L. B. (2).

*Leontocaris* Stebbing, 1905, recommended for addition to "Official List", **Holthuis**, L. B. (1); *L. lar*, figd., **Holthuis**, L. B. (2).

*Leptocarpus fluminicola*, figd., **Holthuis**, L. B. (2).

*Leptochela* Stimpson, 1860, recommended for addition to "Official List", **Holthuis**, L. B. (1); *L. aculeocaudata*, post-larvae, fig., **Pillai**, N. K.; *L. bermudensis*, figd., **Holthuis**, L. B. (2).

*Ligur* Sarato, 1885, recommended for addition to "Official List", **Holthuis**, L. B. (1); *L. edwardsii*, figd., discussed, etc., **Dieuzeide**, R.; *L. ensiferus*, figd., **Holthuis**, L. B. (2).

*Limnocaridella* Bouvier, 1913, recommended for addition to "Official List", **Holthuis**, L. B. (1); *L. alberti*, figd., **Holthuis**, L. B. (2).

*Limnocaridina* Calman, 1899, recommended for addition to "Official List", **Holthuis**, L. B. (1); *L. tanganyikae*, figd., **Holthuis**, L. B. (2).

*Lucaya bigelowi*, figd., **Holthuis**, L. B. (2).

*Lysmata seticaudata*, neurosecretion, eye-stalk, figs., **Gabe**, M.; *L. trisetacea*, figd., **Holthuis**, L. B. (2).

*Macrobrachium* lar, figd., **Holthuis**, L. B. (2); *M. tenellum*, figd., **Holthuis**, L. B.

*Meningodora mollis*, figd., **Holthuis**, L. B. (2).

*Merguia* Kemp, 1914, recommended for addition to "Official List", **Holthuis**, L. B. (1); *M. oligodon*, figd., **Holthuis**, L. B. (2).

*Merhippolyte* Bate, 1888, recommended for addition to "Official List", **Holthuis**, L. B. (1); *M. calmani*, figd., **Holthuis**, L. B. (2).

*Mesocaris* A and B, larvae figured, **Pillai**, N. K.

*Metabetaeus minutus*, figd., **Holthuis**, L. B. (2).

*Micratya* Bouvier, 1913, recommended for addition to "Official List", **Holthuis**, L. B. (1); *M. poeyi*, figd., **Holthuis**, L. B. (2).

*Miersia*, Suppression of generic name *Misersia* Kingsley, 1879, for purpose of rendering generic name *Acanthephyra* Milne Edwards A, 1881, the oldest available name for the genus concerned, **Opinion 359**.

*Mimocaris* Nobili, 1903, recommended for addition to "Official List", **Holthuis**, L. B. (1); *M.*

*heterocaroides*, figd., **Holthuis**, L. B. (2).

*Nauticaris* Bate, 1888, recommended for addition to "Official List", **Holthuis**, L. B. (1); *N. marionis*, figd., **Holthuis**, L. B. (2).

Nematocarcinidae, synonymy, **Holthuis**, L. B. (2); Nematocarcininae Smith, 1884, recommended for addition to "Official List"; **Holthuis**, L. B. (1).

*Nematocarcinus* Milne Edwards, 1881, recommended for addition to "Official List", **Holthuis**, L. B. (1); *N. ensifer*, figd., **Holthuis**, L. B. (2).

*Neopalpheopsis hiatti*, figd., **Holthuis**, L. B. (2).

*Neopontonides beaufortensis*, figd., **Holthuis**, L. B. (2).

*Nikoides* Paulson, 1875, recommended for addition to "Official List", **Holthuis**, L. B. (1); *N. maldivenensis*, figd., **Holthuis**, L. B. (2); *N. nanus*, p. 8, **sp. nov.** Marshall Ids., figs., Proc. U.S. nat. Mus. 105 No. 3349 1955 : **Chace**, F. A., Jr.

*Notocrangon* Coutière, 1900, recommended for addition to "Official List", **Holthuis**, L. B. (1); *N. antarctica*, figd., **Holthuis**, L. B. (2).

*Notostomus* Milne Edwards, 1881, recommended for addition to "Official List", **Holthuis**, L. B. (1); *N. robustus*, figd., **Holthuis**, L. B. (2).

*Ogyrides* Stebbing, 1914, recommended for addition to "Official List", **Holthuis**, L. B. (1); *O. limicola* p. 57, **sp. nov.** N. Carolina, J. Wash. Acad. Sci. 45 2 1955 : figs., **Williams**, A. B. (2); *O. sibogae*, post-larvae, etc., fig., **Pillai**, N. K.; *O. striaticauda*, figd., **Holthuis**, L. B. (2).

*Onyccaris quadratophthalma*, figd., **Holthuis**, L. B. (2).

Oplophoridae, Key to genera, **Holthuis**, L. B. (2); Oplophorinae Dana, 1852, recommended for addition to "Official List", **Holthuis**, L. B. (1).

*Oplophorus* Milne Edwards, 1837, recommended for addition to "Official List", **Holthuis**, L. B. (1); *O. spinosus*, fig., **Holthuis**, L. B. (2).

*Palaemon* (*Palaemon*) *longirostris*, P. (*Nematopalaemon*) *tenuipes*, P. (*Exopalaemon*) *styliferus*, P. (*Palaemon*) *floridanus* figd., **Holthuis**, L. B. (2).

*mon*) *styliferus*, P. (*Palaemon*) *floridanus* figd., **Holthuis**, L. B. (2).

*Palaemonella* Dana, 1852, recommended for addition to "Official List", **Holthuis**, L. B. (1); *P. vestigialis*, figd., **Holthuis**, L. B. (2).

*Palaemonetes* Heller, 1869, recommended for addition to "Official List", **Holthuis**, L. B. 1; *P. hornelli*, Post larva, figured, **Pillai**, N. K.; *P. (Palaemonetes) kadiakensis*, P. (*Alaocaris*) *antrorum*, figd., **Holthuis**, L. B. (2); *P. varians*, urine production of antennal glands, **Parry**, G.

*Palaemonias* Hay, 1901, recommended for addition to "Official List". **Holthuis**, L. B. (1); *P. ganteri*, figd., **Holthuis**, L. B. (2).

Palaemoninae, Key to S. African genera and subgenera, **Barnard**, K. H. (4); Palaemoninae, Key to genera, **Holthuis**, L. B. (2).

Pandalidae, Key to genera, **Holthuis**, L. B. (2).

Pandalid A, and B, figured larvae, **Pillai**, N. K.

*Pandalina* Calman, 1899, recommended for addition to "Official List", **Holthuis**, L. B. (1); *P. brevirostris*, figd., **Holthuis**, L. B. (2).

*Pandalopsis ampla*, figd., **Holthuis**, L. B. (2).

*Pandalus borealis*, possible new vitamin A, isomer in eyes, **Lambertsen**, G. & **Braekkan**, O. R.; *P. montagui*, figd., **Holthuis**, L. B. (2); *Pandalus* sp., larvae, figured, **Pillai**, N. K.

*Pantomus* Milne Edwards, 1883, recommended for addition to "Official List", **Holthuis**, L. B. (1).

*Parabetaeus calliereti*, figd., **Holthuis**, L. B. (2).

*Paracrangon* Dana, 1852, recommended for addition to "Official List", **Holthuis**, L. B. (1); *P. areolata*, figd., **Holthuis**, L. B. (2).

*Paralatreutes* Kemp, 1925, recommended for addition to "Official List", **Holthuis**, L. B. (1); *P. bicornis*, figd., **Holthuis**, L. B. (2).

*Paranchistus biunguiculatus*, figd., **Holthuis**, L. B. (2).

*Parapandalus* Borradaile, 1899, recommended for addition to "Official



List", **Holthuis**, L. B. (1); *P. richardi*, photophores and luminescence, **Dennell**, R.; figd., **Holthuis**, L. B. (2); *Parapandalus* sp., larvae, fig., **Pillai**, N. K.

*Parapasiphae* Smith, 1884, recommended for addition to "Official List", **Holthuis**, L. B. (1); *P. sulcatifrons*, figd., **Holthuis**, L. B. (2).

*Paratya* Miers, 1882, recommended for addition for "Official List", **Holthuis**, L. B. (1); *P. compressa*, behavior to coloured light, figs., **Nagano**, T.; figd., **Holthuis**, L. B. (2).

*Paratypton* Balss, 1914, recommended for addition to "Official List", **Holthuis**, L. B. (1); *P. siebenrocki*, figd., **Holthuis**, L. B. (2).

*Pasiphaea* Savigny, 1816, recommended for addition to "Official List", **Holthuis**, L. B. (1); *P. multidentata*, figd., **Holthuis**, L. B. (2); *P. sivado*, attachment of eggs, figs., **Yonge**, C. M.

Pasiphaeidae Dana, 1852, recommended for addition to "Official List", **Holthuis**, L. B. (1); Key to genera, **Holthuis**, L. B. (2).

*Patomus affinis*, figd., **Holthuis**, L. B. (2).

*Periclimenaeus* Borradaile, 1915, recommended for addition to "Official List", **Holthuis**, L. B. (1).

*Periclimenes* Costa, 1844, recommended for addition to "Official List", **Holthuis**, L. B. (1); *P. (Harpilius) brevicarpalis*, figd., **Holthuis**, L. B. (2); *P. (Periclimenes) impar*, figd., **Holthuis**, L. B. (2); *P. tridentatus*, figd., **Holthuis**, L. B. (2); *Periclimenes* sp., figd., Comoro Ids., **Fourmanoir**, P.; *Periclimenes* A and B, larvae, fig., **Pillai**, N. K.

*Peripandalus serratus*, figd., **Holthuis**, L. B. (2).

*Philarius imperialis*, figd., **Holthuis**, L. B. (2).

*Phycocaris* Kemp 1916, recommended for addition to "Official List", **Holthuis**, L. B. (1); *P. simulans*, figd., **Holthuis**, L. B. (2).

*Phyllognathia* Borradaile, 1915, recommended for addition to "Official List", **Holthuis**, L. B. (1); *P. ceratophthalma*, figd., **Holthuis**, L. B. (2).

*Physetocaris microphthalma*, figd., **Holthuis**, L. B. (2).

*Platycaris latirostris*, figd., **Holthuis**, L. B. (2).

*Plesionika* Bate, 1888, recommended for addition to "Official List", **Holthuis**, L. B. (1); *P. acanthonotus*, *P. martia*, figs., discussed, etc., **Dieuzeide**, R.; *P. antigii* p. 111, **sp. nov.** Mediterranean, figs., comp. with *P. heterocarpus*, Publ. Inst. Biol. Barcelona 19 1955; **Zariquiey**, A. (1); *P. martia*, figd., **Holthuis**, L. B. (2).

*Pomagnathus corallinus*, figd., **Holthuis**, L. B. (2).

*Pontocaris* Bate, 1888, recommended for addition to "Official List", **Holthuis**, L. B. (1); *P. lacazei*, figd., **Holthuis**, L. B. (2).

*Pontonia pinnophylax*, figd., **Holthuis**, L. B. (2).

*Pontonides* Borradaile, 1917, recommended for addition to "Official List", **Holthuis**, L. B. (1); *P. unciger*, figd., **Holthuis**, L. B. (2).

Pontoniinae, Key to genera, **Holthuis**, L. B. (2).

*Pontoniopsis comanthi*, figd., **Holthuis**, L. B. (2).

*Pontophilus bidentatus*, figd., **Holthuis**, L. B. (2); *P. bispinosus*, North Sea plankton, **Rees**, C. B.; *Pontophilus* sp., figd., Comoro Ids., **Fourmanoir**, P.

*Potimirim mexicana*, figd., **Holthuis**, L. B. (2).

*Prionocrangon* Wood Mason & Alcock, 1891, recommended for addition to "Official List", **Holthuis**, L. B. (1).

*Processa*, Key to S. African species, **Barnard** (4); *P. australiensis*, post larvae, fig., **Pillai**, N. K.; *P. canaliculata*, figd., **Holthuis**, L. B. (2); *P. edulis*, *P. aequimana*, North Sea Plankton larvae, **Rees**, C. B.; *P. molaris*, p. 11, **sp. nov.** Marshall Ids., figd., Proc. U.S. nat. Mus. 105 No. 3349 1955; **Chace**, F. A., Jr.

Psalidopodidae Wood Mason & Alcock, recommended for addition to "Official List", **Holthuis**, L. B. (1).

*Psalidopus* Wood Mason & Alcock, 1892, recommended for addition to

"Official List", **Holthuis**, L. B. (1) ; *P. huxleyi*, figd., **Holthuis**, L. B. (2).

*Psathyrocaris* Wood Mason & Alcock, 1893, recommended for addition to "Official List", **Holthuis**, L. B. (1) ; *P. infirma*, figd., **Holthuis**, L. B. (2).

*Pseudocoutierea elegans*, figd., **Holthuis**, L. B. (2).

*Pseudopalaemon* Sollaud, 1911, recommended for addition to "Official List", **Holthuis**, L. B. (1) ; *P. bouvieri*, figd., **Holthuis**, L. B. (2).

*Pterocaris typica*, figd., **Holthuis**, L. B. (2).

*Racilius compressus*, figd., **Holthuis**, L. B. (2).

*Rhynchocinetes* Milne Edwards, 1837, recommended for addition to "Official List", **Holthuis**, L. B. (1) ; *R. typus*, figd., **Holthuis**, L. B. (2).

Rhynchocinetidae Ortmann, 1890, recommended for addition to "Official List", **Holthuis**, L. B. (1).

*Sabinea* Ross, 1835, recommended for addition to "Official List", **Holthuis**, L. B. (1) ; *S. hystrix*, figd., **Holthuis**, L. B. (2).

*Salmonus jarli*, figd., **Holthuis**, L. B. (2).

Saron Thallwitz, 1891, recommended for addition to "Official List", **Holthuis**, L. B. (1) ; *S. marmoratus*, figd., **Holthuis**, L. B. (2).

*Sclerocrangon* Sars, G. O., 1883, recommended for addition to "Official List", **Holthuis**, L. B. (1) ; *S. jacqueti*, figd., **Holthuis**, L. B. (2) ; *S. ochotensis*, p. 235, **sp. nov.** Kurile region, Okhotsk Sea, *S. variabilis asiaticus*, p. 236, **sub. sp. nov.** S.E. of Shikolan Isl., Trav. Inst. zool. Acad. Sci. URSS. 18 1955 : **Kobyakova**, Z. I.

*Sicyonia carinata*, reproduction, fig., **Balss**, H.

*Spirontocaris gurjanovae* **sp. nov.** Kurile Straits, Trav. Inst. zool. Acad. Sci. URSS. 18 1955 238 : **Kobyakova**, Z. I. ; *S. lilljeborgi*, figd., **Holthuis**, L. B. (2).

*Stegopontonia* Nobili, 1906, recommended for addition to "Official List", **Holthuis**, L. B. (1) ; *S. commensalis*, figd., **Holthuis**, L. B. (2).

Stylodactylidae Bate, 1888, recommended for addition to "Official List", **Holthuis**, L. B. (1).

*Stylodactylus* Milne Edwards, 1881, recommended for addition to "Official List", **Holthuis**, L. B. (1) ; *S. amarynthi*, figd., **Holthuis**, L. B. (2).

*Sympasiphaea annectens*, figd., **Holthuis**, L. B. (2).

*Synalpheus* Bate, 1888, recommended for addition to "Official List", **Holthuis**, L. B. (1) ; *S. brevicarpus*, figd., **Holthuis**, L. B. (2).

*Syncaris* Holmes, 1900, recommended for addition to "Official List", **Holthuis**, L. B. (1) ; *S. pasadenae*, figd., **Holthuis**, L. B. (2).

*Systellaspis* Bate, 1888, recommended for addition to "Official List", **Holthuis**, L. B. (1) ; *S. debilis*, figd., **Holthuis**, L. B. (2).

Thalassocarididae Bate, 1888, recommended for addition to "Official List", **Holthuis**, L. B. (1).

*Thalassocaris* Stimpson, 1860, recommended for addition to "Official List", **Holthuis**, L. B. (1) ; *T. crinita*, figd., **Holthuis**, L. B. (2) ; figd., **Chace**, F. A., Jr.

*Thaumastocaris* Kemp, 1922, recommended for addition to "Official List", **Holthuis**, L. B. (1) ; *T. streptopus*, figd., **Holthuis**, L. B. (2).

*Thor*, Kingsley, 1878, recommended for addition to "Official List", **Holthuis**, L. B. (1) ; *T. paschalis*, figd., **Holthuis**, L. B. (2).

*Thoralis cranchi*, figd., **Holthuis**, L. B. (2).

*Thunor rathbunae*, figd., **Holthuis**, L. B. (2).

*Tozeurina novae-zealandiae*, figd., **Holthuis**, L. B. (2).

*Trachycaris* Calman, 1906, recommended for addition to "Official List", **Holthuis**, L. B. (1) ; *T. restricta*, figd., **Holthuis**, L. B. (2).

*Troglocaris* Dormitzer, 1853, recommended for addition to "Official List", **Holthuis**, L. B. (1) ; *T. anaphthalmus*, figd., **Holthuis**, L. B. (2). *T. schmidtii*, figd., **Karaman**, S. L. (1).

*Troglocubarus gibarensis*, figd., **Holthuis**, L. B. (2).

*Typhlatya garciai*, figd., **Holthuis**, L. B. (2).

Typhlocaridinae Annadale & Kemp, 1913, recommended for addition to "Official List", **Holthuis**, L. B. (1).

*Typhlocaris* Calman, 1909, recommended for addition to "Official List", **Holthuis**, L. B. (1); *T. galilea*, figd., **Holthuis**, L. B. (2).

*Typton* Costa, 1844, recommended for addition to "Official List", **Holthuis**, L. B. (1); *T. spongicola*, attachment of eggs, figs., **Yonge**, C. M.; *T. tortugae*, figd., **Holthuis**, L. B. (2).

*Veleronia serratifrons*, figd., **Holthuis**, L. B. (2).

*Vercoia gibbosa*, figd., **Holthuis**, L. B. (2).

*Vir orientalis*, figd., **Holthuis**, L. B. (2).

*Waldola schmitti*, figd., **Holthuis**, L. B. (2).

*Xiphocaris* Von Martens 1872, recommended for addition to "Official List", **Holthuis**, L. B. (1); *X. elongata*, figd., **Holthuis**, L. B. (2).

#### PENAEIDEA

Pencidae, Singapore (Keys) economic species, **Kow**, Ah T.; survey shrimp nursery, N. Carolina, **Williams**, A. B. (1); life histories N. Carolina, **Williams**, A. B.; provisional Keys to American forms, **Anderson**, W. W. & **Lindner**, M. J.; larval stages, **Heldt**, J. H. (2); culture in Travancore, **Menon**, M. K.; littoral, N.S. Wales and Queensland, **Racek**, A. A.

*Acetes erythraeus*, *A. vulgaris*, *A. dispar*, *A. serrulatus*, all figd., Singapore, **Kow**, Ah T.; *A. natalensis*, p. 43, **sp. nov.** (no figs.) S. Africa, Ann. S. Afr. Mus. 43 1 1955: **Barnard**, K. H. (4).

*Artemesia* in Kyalnitzk liman, Odessa region, **Buyanovskaya**, A. A.

*Ensicyonia lancifer*, figs., **Kurien**, C. V.

*Metapenaeopsis* sp. ?, figd., **Chace**, F. A., Jr.

*Metapenaeus burkenroadi*, p. 24, **sp. nov.** Creeks, nr. Karachi, India, Zool. Mag. Tokyo 64 1955: figs., **Kubo**, I. (2); *M. joyneri*, life-history in Ariake Sea, **Ikematsu**, W.;

*M. macleayi*, *M. endeavouri*, *M. incisipes*, *M. mastersii*, figd., Keys, etc., **Racek**, A. A.

*Miyadiella ornata*, p. 76, **sp. nov.** Java seas, figs., Vidensk Medd. fra. Dansk. naturh. Foren. Od. 117 1955: **Holthuis**, L. B. (3).

*Parapenaeopsis sculptilis* var. *cultrirostris*, figd., Singapore, **Kow**, Ah T.

*Parapenaeus longirostris*, presence of both thelycum and petasma, figs., **Esclère**, M.

*Penaeopsis* (*Metapenaeopsis*) *novae-guineae*, figd., **Racek**, A. A.; *P. brevicornis*, *P. monoceros*, *P. affinis*, *P. ensis*, all figd., Singapore, **Kow**, Ah T.

*Penaeus*, nomenclature, correction of an erroneous entry on the "Official List of generic names in zoology" relating to the generic name "Penaeus" (emend. of Peneus") Weber 1795 . . . (Correction of an error in "Opinion" 104, **Direction 15**; *P. braziliensis*, neurosecretion, figs., **Gabe**, M.; *P. carinatus*, *P. caeruleus*, *P. esculentus*, *P. merguensis*, *P. plebejus*, figd., **Racek**, A. A.; *P. duorarum*, study of fauna in Gulf of Campeche, **Hildebrand**, H. H. *P. japonicus*, *P. latisulcatus*, *P. carinatus*, *P. semisulcatus*, *P. indicus* var. *longirostris*, *P. merguensis*, all figd., Singapore, **Kow**, Ah T.; *P. japonicus*, mass growth, **Kubo**, I.; *P. setiferus*, *P. duorarum*, *P. aztecus*, esturine part of Life histories, N. Carolina, graphs, etc., **Williams**, A. B.; *P. setiferus*, marking experiments, **Menzel**, R. W.

*Sergestes richardi*, photophores and luminescence, other species mentioned, figs., **Dennell**, R.

*Sicyonella maldivensis*, *S. inermis*, figd., **Chace**, F. A., Jr.

*Sicyonia bispinosa* ? figd., **Chace**, F. A., Jr.

*Solenocera membranacea*, larval stages, etc., figs., **Heldt**, J. H. (2).

*Systellaspis debilis*, photophores and luminescence, figs., **Dennell**, R.

*Trachypeneus* (*Trachysalambria*) *curvirostris*, *T. (Trachypeneus) anchoralis*, figd., **Racek**, A. A.

*Waptia fieldensis*, comparison with peneid protozoa, etc., figs., **Heldt**, J. H. (1).



## EUPHAUSIACEA

Euphausiacea, Benguela Current, development, etc., **Boden, B. P.**; N. Pacific, **Boden, B. P.**, **Johnson, M. W.** & **Brinton, E.**; Arctic Ocean, ecology, distribution, etc., **MacGinitie, G. E.**

Euphausiacea, systematic position, **Gordon, I.**

Euphausiacea, larval stages Atlantic, **Lewis, J. B.**; vitamin A and carotenoids, **Fisher, L. R.**, **Kon, S. K.** & **Thompson, S. Y.**; vitamin A distribution, **Fisher, L. R.**, **Kon, S. K.**, **Plack, P. A.** & **Thompson, S. Y.**

*Bentheuphausia amblyops*, figd., **Boden, B. P.**, **Johnson, M. W.** & **Brinton, E.**

*Euphausia lucens*, *E. tenera*, development, etc., from Benguela Current, **Boden, B. P.**; *E. pacifica*, euphausiopsin, a new photosensitive pigment in the eyes, **Kampa, E. M.**; *E. recurva*, *E. mutica*, *E. brevis*, *E. diomedae*, *E. eximia*, *E. pacifica*, *E. tenera*, *E. similis*, *E. paragibba*, *E. pseudogibba*, *E. hemigibba*, *E. distinguenda*, *E. lamelligera*, *E. gibboides*, all figd., Key to spp., **Boden, B. P.**, **Johnson, M. W.** & **Brinton, E.**

*Nematobrachion flexipes*, *N. sexspinosus*, *N. bööpis*, figs., Key to spp., **Boden, B. P.**, **Johnson, M. W.** & **Brinton, E.**

*Nematoscelis difficilis*, *N. tenella*, *N. microps*, *N. gracilis*, *N. atlantica*, all figd., Key to spp., **Boden, B. P.**, **Johnson, M. W.** & **Brinton, E.**; *N. megalops*, developmental phases, etc., Benguela current, **Boden, B. P.**

*Nyctiphanes capensis*, development, etc., figs., **Boden, B. P.**; *N. simplex*, figd., **Boden, B. P.**, **Johnson, M. W.** & **Brinton, E.**

*Pseudeuphausia latifrons*, figd., **Boden, B. P.**, **Johnson, M. W.** & **Brinton, E.**

*Stylocheiron carinatum*, *S. elongatum*, *S. maximum*, *S. abbreviatum*, larval stages, figd., described, **Lewis, J. B.**; *S. carinatum*, *S. affine*, *S. suhmii*, *S. microphthalmus*, *S. elongatum*, *S. longicorne*, *S. abbreviatum*, *S. maximum*, all figd., Key to spp., **Boden, B. P.**, **Johnson, M. W.** & **Brinton, E.**

*Tessarabrachion oculatus*, figd., **Boden, B. P.**, **Johnson, M. W.** & **Brinton, E.**

*Thysanoessa spinifera*, *T. longipes*, *T. inermis*, *T. raschii*, *T. gregaria*, all figd., Key to spp., **Boden, B. P.**, **Johnson, M. W.** & **Brinton, E.**

*Thysanopoda monacantha*, *T. cristata*, *T. triuspidata*, *T. aequalis*, *T. obtusifrons*, *T. pectinata*, *T. orientalis*, *T. acutifrons*, *T. cornuta*, *T. egregia*, *T. spinicaudata*, all figd., Key to spp., etc., **Boden, B. P.**, **Johnson, M. W.** & **Brinton, E.**

## AMPHIPODA

Amphipoda, deep sea, **Schellenberg, A.**

Amphipoda, Indo-China seas, **Dawydoff, C.**; Azores, **Chapman, G.**; **Chapman, G.** & **Santler, J. E.**; Cumbrae, **Clark, R. B.** & **Milne, A.**; British Coast, **Colman, J. S.** & **Segrove, F. (2)**; **Colman, J. S.** & **Segrove, F.**; **Prud'homme van Reine, W. J.**; Black Sea, **Carausus, S.**, **Dobreanu, E.** & **Manolache, C.**; Arctic Ocean, ecology, etc., **MacGinitie, G. E.**; Brazil Coast, **Oliveira, L. P. H. de (3)**.

British Isles, **Hynes, H. B. N. (1)**; Cheshire, **McMillan, N. F.**; S. Europe, **Franz, H.**; Italy, **Lenz, F.**; Spain, **Margalef, R. (1)**; **Margalef, R.**; Greece, **Karaman, S. L. (6)**; Rumania, **Dobreanu, E.**, **Manolache, C.** & **Puscariu, V. (1)**; Prague wells, **Rechačková, V.**; Madagascar, **Ruffo, F.**; Florida & Texas, **Wurtz, C. B.** & **Rombach, S. S.**; California (benthos), **Barnard, J. L. (1)**; Alaska, **Shoemaker, C. R.**

## GAMMARIDEA

Gammaridea in Bishop Museum, Hawaiian Islands, **Barnard, J. L. (3)**; Mediterranean, **Carausus, S.**, **Dobreanu, E.** & **Manolache, C.**; British Isles, **Hynes, H. B. N.**; N. Zealand waters, **Hurley, D. E. (1)**; Kurile Kamchatka depression (pelagic), **Birshtein, Y. A.** & **Vinogradov, M. E.**

*Afrochiltonia*, p. 23, **gen. nov.** (*Talitridae*) for *Chiltonia capensis*, S. Africa, discussion, **Ann. S. Afr. Mus. 43 1 1955**; **Barnard, K. H. (4)**.

*Amathillopsis pacifica* **sp. nov.**, S. Okhotsk sea, **Trav. Inst. zool. Acad.**

Sci. URSS. 18 1955 209 : **Guryanova**, E. F.

*Ampelisca birulai*, figd., **Shoemaker**, C. R. ; *A. eschrichti pacifica* **subsp. nov.**, Kurile-Sakhalin region, Trav. Inst. zool. Acad. Sci. URSS. 18 1955 167 : **Guryanova**, E. F. ; *A. soleata*, p. 604, **sp. nov.** Brazil Coast, figs., Mem. Inst. Osw. Cruz. 52 3-4 1955 : **Oliveira**, L. P. H. de (3).

Amphilocheidae, Key New Zealand genera, **Hurley**, D. E. (1).

*Amphilocheus brunneus*, new to British coasts, **Duhig**, M. & **Humphries**, C. L. ; *A. filidactylus*, **sp. nov.** p. 209, N. Zealand waters, figs., Trans. roy. Soc. N.Z. 83 1 1955 : **Hurley**, D. E. (1) ; *A. manudens*, new to Irish Coasts, **Duhig**, M. & **Humphries**, C. L. ; *A. spence-batei*, new to Irish Coasts, **Duhig**, M. & **Humphries**, C. L.

*Amphitoe Kussakini* **spec. nov.** Shikotan Isl. (Otradange Bay), Trav. Inst. zool. Acad. Sci. URSS. 18 1955 215 : **Guryanova**, E. F. ; *A. orientalis*, figd., **Barnard**, J. L. (3) ; *A. vaillanti*, new to Irish Coasts, **Duhig**, M. & **Humphries**, C. L.

*Anamixis linsleyi*, p. 28, **sp. nov.** California, commensal in sponge, figs., Pacific Sci. IX 1955 : **Barnard**, J. L. (5).

Anatylidae, p. 204, **fam. nov.** for *Anatylus*, p. 205, **gen. nov.**, *A. pavloskii*, p. 206, **sp. nov.** Japanese Seas, Trav. Inst. zool. Acad. Sci. URSS. 21 1955 : **Bulicheva**, A. I. (1).

*Andaniexis subabyssi*, p. 240, **sp. nov.** Kurile-Kamchatka depression, Trud. Inst. Okeanol. 12 1955 : **Birshtein**, Y. A. & **Vinogradov**, M. E.

*Anisogammarus (Eogammarus) macginitiei*, p. 54, **sp. nov.** Point Barrow, Alaska, Smithsonian. misc. Coll. 128 1 1955 : **Shoemaker**, C. R. ; *A. (Eogammarus) turgimanus*, **sp. nov.** Coast of China, Acta Zool. Sinica 7 1955 p. 97 figs : **Shen**, C. J.

*Aruga holmesi*, p. 100, **sp. nov.**, *A. oculata*, *A. (?) dissimilis*, all figd., California coast, Bull. S. Calif. Acad. Sci. 54 2 1955 : **Barnard**, J. L. (4).

*Astyra bogorova*, p. 255, *A. zenkevitchi*, p. 254, **spp. nov.** Kurile Kamchatka

depression, Trud. Inst. Okeanol. 12 1955 : **Birshtein**, Y. A. S. & **Vinogradov**, M. E.

*Autonoe conicurvae*, p. 345, **sp. nov.**, figs., Brazil Coast, descrip. and geometrical analysis, Mem. Inst. Osw. Cruz. 53 2-4 1955 : **Oliveiro**, L. P. H. de (2).

*Bogidiella albertimagni skopljensis*, fig., **Karaman**, S. L. (1) ; *B. skopljensis*, figd., **Cărăușu**, S., **Dobreanu**, E. & **Manolache**, C.

Brachyscelidae, Key to N.Z. genera, **Hurley**, D. E.

*Byblis anisuropus*, figs., **Barnard**, K. H. (4).

*Cardiophilus miloslavskajae*, figd., **Cărăușu**, S., **Dobreanu**, E. & **Manolache**, C.

*Ceradocus (Denticeradocus) hawaiiensis* p. 5, **sp. nov.** Hawaiian Islands, Bull. Bishop Mus. Honolulu, no. 215 1955 : figs., **Barnard**, J. L. (3).

*Cerapus difformis*, fig., **Prud'homme van Reine**, W. J.

*Chaetogammarus tenellus behningi*, C. *tenellus major*, C. *placidus*, C. *warpachowskyi*, all figd., **Cărăușu**, S., **Dobreanu**, E. & **Manolache**, C.

*Cheirocratus intermedius*, new to Irish Coasts, **Duhig**, M. & **Humphries**, C. L.

*Chelura brevicauda*, p. 25, **sp. nov.**, figs. (descrip. in Japanese), Japanese waters, Misc. Rep. Res. Inst. Nat. Res. 1948, 12 : **Shiino**, S. M. (26) ; *C. terebrans*, wood boring habits, figs., **Barnard**, J. L. (6).

*Cleonardo macrocephala*, p. 273, **sp. nov.** Kurile-Kamchatka depression, Trud. Inst. Okeanol. 12 1955 : **Birshtein**, Y. A. J. & **Vinogradov**, M. E.

*Colomastix japonica*, p. 197, **sp. nov.** Japanese Seas, Trav. Inst. zool. Acad. Sci. URSS. 21 1955 : **Bulicheva**, A. I. ; *C. pusilla*, figd., **Barnard**, J. L. (3).

*Corophium monospinum*, **sp. nov.** Coast of China, Acta Zool. Sinica 7 1955 p. 99 figs. : **Shen**, C. J. ; *C. shoemakeri*, **sp. nov.** p. 198, Philippine Isd., figs., Bull. Mus. Hist. nat. Paris (2) 27 3 1955 : **Monod**, T. (2) ; *C. velutator*,

fig., **Prud'homme van Reine**, W. J. ; *C. volutator orientalis*, *C. nobile*, *C. chelicorne*, *C. maoticum*, *C. robustum*, *C. curvispinum*, *C. curvispinum villosus*, all figd., **Cărăușu**, S., **Dobreanu**, E. & **Manolache**, C.

*Crangonyx gracilis*, life-cycle, discussed, etc., Brit. Isles, **Hynes**, H. B. N. ; distribution in Britain, **Hynes**, H. B. N. (1).

*Cressa dubia*, new to Irish Coasts, **Duhig**, M. & **Humphries**, C. L.

*Cyllopus magellanicus*, *C. macrobis*, figd., discussed, N.Z. waters, **Hurley**, D. E.

*Cymadusa oceanica*, p. 31, **sp. nov.**, *C. filosa*, Hawaiian Islands, figd., Bull. Bishop Mus. Honolulu No. 215 1955 : **Barnard**, J. L. (3).

*Cyphisphimedia*, p. 87, **gen. nov.** (Acanthonotozomatidae) for *C. gibba*, p. 88, **sp. nov.**, figs., S. Africa, Ann. S. Afr. Mus. 43 1 1955 ; **Barnard**, K. H. (4).

*Dikerogammarus haemobaphes fluvialtilis*, *D. villosus*, *D. villosus bispinosus*, figd., **Cărăușu**, S., **Dobreanu**, E. & **Manolache**, C.

*Dulichia arctica*, figd., **Shoemaker**, C. R.

*Elasmopus pecteniscus*, *E. rapax*, figs., **Barnard**, J. L. (3).

*Epimeria pacifica*, **sp. nov.** Shikotan Island, Trav. Inst. zool. Acad. Sci. URSS. 18 1955 191 : **Guryanova**, E. F.

*Erichthonius difformis*, new to Irish Coasts, **Duhig**, M. & **Humphries**, C. L.

*Euonyx conicurus*, p. 80, **sp. nov.**, figs., S. Africa, Ann. S. Afr. Mus. 43 1 1955 : **Barnard**, K. H. (4).

*Eurystheus holmesi*, *E. palmoides*, figs., **Barnard**, K. H. (4) ; *E. melanops*, figd., **Shoemaker**, C. R.

*Eurythenes fusiformis* **sp. nov.** Kurile-Kamchatka depression, p. 225, Trav. Inst. Okeanol. 12 1955 : **Birshtein**, Y. A. & **Vinogradov**, M. E.

*Eusirogenes homocarpus* **sp. nov.**, p. 263, Kurile-Kamchatka depression, Trud. Inst. Okeanol. 12 1955 263 : **Birshtein**, Y. A. & **Vinogradov**, M. E.

*Eusirus bathybius*, p. 188, **sp. nov.** N. Atlantic, figs., Rep. Sw. Deep-Sea Exped. 2 2 1955 : **Schellenberg**, A.

*Gammarus*, histophysiology of alimentary tract, **Mabillot**, S. ; *G. duebeni*, distribution in Britain, **Hynes**, H. B. N. (1) ; *G. lacustris*, first Spanish, fresh-water record, **Margalef**, R. (1) ; distribution in Britain, **Hynes**, H. B. N. (1) ; *G. locusta*, study in L. Veneta, figs., **Brian**, A. (2) ; *G. lusitanus*, N.W. Spain, figs., **Margalef**, R. ; *G. pulex*, *G. lacustris*, contribution to late and post-glacial immigration history, N. Europe, **Segestråle**, S. G. ; *G. pulex*, ethiology, **Berner**, L. ; heart-beat frequency study, etc., **Schwartzkopff**, J. ; distrib. in Britain, **Hynes**, H. B. N. (1) ; *G. pulex pulex*, *G. lacustris*, *G. fasciatus*, life-cycles, distrib., etc., discussed, Brit. Isles, **Hynes**, H. B. N. ; *G. tigrinus*, distribution in Britain, **Hynes**, H. B. N. (1).

*Gmelina costata aestuarica*, *G. pusilla*, figd., **Cărăușu**, S., **Dobreanu**, E. & **Manolache**, C.

*Gitanopsis arctica*, figd., **Shoemaker**, C. R. ; *G. squamosa*, *G. pusilloides*, figd., **Hurley**, D. E. (1).

*Hadzia gjorgjevici*, fig., **Karaman**, S. L. (1).

*Halice quarta*, p. 246, *H. shoemakeri*, p. 244, **spp. nov.**, Kurile-Kamchatka depression, Trud. Inst. Okeanol. 12 1955 : **Birshtein**, Y. A. S. & **Vinogradov**, M. E.

*Harpinia pectinata*, new to Irish Coasts, **Duhig**, M. & **Humphries**, C. L.

*Hippomedon granulosus* **sp. nov.**, p. 195, Peter the Great Bay, Trav. Inst. zool. Acad. Sci. URSS. 21 1955 195 : **Bulicheva**, A. I. (1).

*Hyale ayeli*, p. 14, *H. bishopae*, p. 16, **sp. nov.**, *H. affinis*, *H. honoluluensis*, Hawaiian Islands, all figd., Bull. Bishop Mus. Honolulu No. 215, 1955 : **Barnard**, J. L. (3) ; *H. grandicornis*, fig., **Barnard**, K. H. (4) ; *H. perieri*, new to Irish Coasts, **Duhig**, M. & **Humphries**, C. L.

*Iphigenella acanthopoda*, *I. andrussowi*, figd., **Cărăușu**, S., **Dobreanu**, E. & **Manolache**, C.



*Lemboides*, Key to S. African species, **Barnard, K. H. (4)**.

*Lembos teleporus*, p. 94, **sp. nov.**, figs., S. Africa, Ann. S. Afr. Mus. **43** 1 1955 : **Barnard, K. H. (4)**.

*Leucothoides pacifica*, p. 26, **sp. nov.** California, commensal in sponge, figs., Pacific Sci. **IX** 1955 : **Barnard, J. L. (5)**.

*Liljeborgia epistomata*, fig., **Barnard, K. H. (4)**.

Lycaeopsidae, Key to N.Z. genera, **Hurley, D. E.**

*Maeroides thompsoni*, note, synonyms, etc., **Shoemaker, C. R. (1)**.

*Marinogammarus pirloti*, new to Irish Coasts, **Duhig, M. & Humphries, C. L.**

*Melita hergensis*, new to Irish Coasts, **Duhig, M. & Humphries, C. L.** ; *M. cylorae*, p. 201, **sp. nov.** Novgorod Bay, S. Japan, Trav. Inst. zool. Acad. Sci. URSS. **21** 1955 : **Bulicheva, A. I.** ; *M. machaera*, p. 90, **sp. nov.**, figs., S. Africa, Ann. S. Afr. Mus. **43** 1 1955 : **Barnard, K. H. (4)** ; *M. obtusata*, new variant, Irish Coasts, **Duhig, M. & Humphries, C. L.** ; *M. palmata*, fig., **Prud'homme van Reine, W. J.** ; *M. valida*, p. 50, **sp. nov.**, figd., Point Barrow, Alaska, Smithsonian. misc. Coll. **128** 1 1955 : **Shoemaker, C. R.** ; *M. zeylanica*, fig., habits, distribution, food, etc., **John, P. A.**

*Mesometopa gibbosa*, p. 24, **sp. nov.** Point Barrow, Alaska, *M. neglecta*, figd., Smithsonian. misc. Coll. **128** 1 1955 : **Shoemaker, C. R.**

*Metacyclocharis*, p. 217, **gen. nov.** for *M. polychaetes*, p. 218, **sp. nov.** Kurile-Kamchatka depression, Trud. Inst. Okeanol. **12** 1955 : **Birshtein, Y. A. & Vinogradov, M. E.**

*Metandania islandica*, figd., **Schellenberg, A.**

*Metensiroides plumipes*, p. 268, **sp. nov.** Kurile-Kamchatka depression, Trud. Inst. Okeanol. **12** 1955 : **Birshtein, Y. A. & Vinogradov, M. E.**

*Metopa bulychaeae*, **sp. nov.** W. off Iturup Isl., Trav. Inst. zool. Acad. Sci. URSS. **18** 1955 170 : **Guryanova, E. F.** ; *M. clypeata*, *M. glacialis*, *M. bruzelii*, *M. spinicoxa* **sp. nov.** p. 20,

Point Barrow, Alaska, Smithsonian. misc. Coll. **128** 1 1955 figs. : **Shoemaker, C. R.** ; *M. cristata*, p. 176, *M. Kobjakovae*, p. 172, *M. timonovi*, p. 174, **spp. nov.** N. Pacific. Trav. Inst. zool. Acad. Sci. URSS **18** 1955 : **Guryanova, E. F.**

*Metopella longimana*, figd., **Shoemaker, C. R.**

*Metopelloides stephensi*, *M. tattersalli*, figd., **Shoemaker, C. R.**

*Monoculodes limnophilus*, figs., **Shen, C. J.**

*Neocyprioidea* **gen. nov.** p. 199 (Amphilochidae) for *Cyproidia otakensis* Chilton, figs., New Zealand waters, *N. peninsulae*, p. 203, *N. pilgrimi*, p. 206, **spp. nov.**, figs., Trans. roy. Soc. N.Z. **83** 1 1955 : **Hurley, D. E. (1)**.

*Niphargoides compactus*, *N. spinicaudatus*, *N. intermedius*, *N. motasi*, all figd., **Cărăușu, S., Dobreanu, E. & Manolache, C.**

*Niphargopsis skopljensis hebereri*, figd., **Karaman, S. L. (1)**.

*Niphargus*, systematics, geographical distr., morphology, etc., discussed, figs., **Brehm, V. (7)** ; *N. kochianus*, *N. kochianus petrosani*, *N. kochianus stygocharis*, *N. pseudokochianus*, *N. skopljensis*, *N. skopljensis phreaticolus*, *N. inopinatus*, *N. carpathicus*, *N. carpathicus romanicus*, *N. carpathicus affinis*, *N. carpathicus variabilis*, *N. molnari*, *N. jovanovici*, *N. jovanovici bajuvaricus*, *N. jovanici incertus*, *N. foreli*, *N. foreli effusus*, *N. foreli bihorensis*, *N. foreli korosensis*, *N. foreli somesensis*, *N. andropus*, *N. tatrensis*, *N. tatrensis hrabeis*, *N. orcinus*, *N. puteanus*, *N. puteanus elegans*, *N. puteanus banaticus*, *N. puteanus baloghi*, *N. valachicus*, *N. stygius*, *N. longicaudatus*, *N. longicaudatus maximus*, *N. aquilex*, *N. aquilex moldavicus*, *N. balcanicus*, all figd., **Cărăușu, S., Dobreanu, E. & Manolache, L.** ; *N. macedonicus*, *N. balcanicus*, figs., **Karaman, S. L. (1)** ; *N. pseudokochianus*, p. 605, **sp. nov.**, *N. carpathicus affinis*, p. 606, *N. carpathicus variabilis*, p. 609, *N. aquilex moldavicus*, p. 612, **sub. spp. nov.** Rumania, subterranean, figs., Bul. sti. Acad. Repub. rom. Sect. Sti. Biol. Agron. Geol. Geogr. **5** 3 1953 : **Dobreanu, E., Manolache, C. & Puscariu, V. (1)** ; *N. rhodi*, p.

106, **sp. nov.**, *N. longicaudatus versluysi*, p. 112, **sub. sp. nov.**, figs., Greece, Rad. Jugosl. Akad. No. 280 1950 : **Karaman, S. L. (6).**

*Nototropis guttatus*, new to Irish Coasts, **Duhig, M. & Humphries, C. L.**; *N. granulosus*, fig., **Barnard, K. H. (4).**

*Orchestia cavimana*, figd., **Carausus, S., Dobreanu, E. & Manolache, C.**; *O. gammarella*, intersexes, **Charniaux-Cotton, H.**; *O. kaakensis*, **sp. nov.**, p. 20, *O. gambiënsis*, *O. pickeringi*, Hawaiian Islands, all figd., Bull. Bishop Mus. Honolulu No. 215 1955 : **Barnard, J. L. (3).**

*Orchomene humilis*, eating fish on the hook, photo., **Heldt, J. H.**

Oxycephalidae, Key to N.Z. genera, **Hurley, D. E.**

*Pachymus*, p. 193, **gen. nov.** for *P. chelatum*, p. 194, **sp. nov.** N. Seas, Japan, Trav. Inst. zool. Acad. Sci. URSS. 21 1955 : **Bulicheva, A. I. (1).**

*Paracallisoma* sp., fig., **Schellenberg, A.**

*Paracyplocaris brevicornis*, **sp. nov.** Kurile-Kamchatka depression, p. 214, Trud. Inst. Okeanol. 12 1955 214 : **Birshtein, Y. A. & Vinogradov, M. E.**

*Paragrubia vorax*, figd., **Barnard, J. L. (3).**

*Paralycaea gracilis*, figd., **Hurley, D. E.**

*Parascelus typhoides*?, figd., **Hurley, D. E.**

*Parathemisto (Euthemisto) gracilipes*, *P. (Euthemisto) gaudichaudii*, *P. (Euthemisto) australis*, figd., **Hurley, D. E.**

*Parensirogenes*, p. 265, **gen. nov.** for *P. carinatus*, p. 266, **sp. nov.** Kurile-Kamchatka depression, Trud. Inst. Okeanol. 12 1955 : **Birshtein, Y. A. & Vinogradov, M. E.**

*Parhyale inyacka*, figd., **Barnard, J. L. (3).**

*Paronesimus barentsi*, figd., **Shoemaker, C. R.**

*Parorchestia hawaiiensis*, figd., **Barnard, J. L. (3).**

*Pectenogammarus planicrurus*, new to Irish Coasts, **Duhig, M. & Humphries, C. L.**

*Photis distinguenda*, p. 195, **sp. nov.** Madagascar, figd., Nat. malgache 7 2 1955 : **Ruffo, S.**; *P. hawaiiensis*, **sp. nov.**, p. 35, Hawaiian Islands, Bull. Bishop. Mus. Honolulu, No. 215 1955 : **Barnard, J. L. (3)**; *P. kurilica*, **sp. nov.** Iturup Isl., Trav. Inst. zool. Acad. Sci. URSS 18 1955 213 : **Guryanova, E. F.**

*Phoxocephalus capuciatius*, p. 313, **sp. nov.** Atlantic, figs., Mem. Inst. Osw. Cruz. 53 2-4 1955 : **Oliveira, L. P. H. de (1).**

Phrosinidae, Key to N.Z. genera, **Hurley, D. E.**

Platyscelidae, Key to N.Z. genera, **Hurley, D. E.**

*Platyscelus ovoides*, figd., **Hurley, D. E.**

*Pleustes panopla*, figd., *P. panopla angulata*, **var. nov.**, p. 41, figs., Point Barrow, Alaska, Smithson. misc. Coll. 128 1 1955 : **Shoemaker, C. R.**

*Podalirius typicus*, fig., **Prud'homme van Reine, W. J.**

*Podoceroopsis lindahlia*, figd., **Shoemaker, C. R.**; *P. nitida*, new to Irish Coasts, **Duhig, M. & Humphries, C. L.**

*Pontogammarus maesticus*, *P. sarsi*, *P. abbreviatus boraceae*, *P. obesus*, *P. crassus*, *P. robustoides*, *P. robustoides aestuarius*, all figd., **Cărausu, S., Dobreanu, E. & Manolache, C.**

*Primno macrocha*, figd., **Hurley, D. E.**

*Proboloides nordmanni*, figd., **Shoemaker, C. R.**

Pronoidae, Key to N.Z. genera, **Hurley, D. E.**

*Prothaumatelson carinatum*, p. 33, **sp. nov.** Point Barrow, Alaska, figd., Smithson. misc. Coll. 128 1 1955 : **Shoemaker, C. R.**

*Protomedea stephenseni* p. 60, **sp. nov.** Point Barrow, Alaska, *P. fasciata*, *P. grandimana*, all figd., Smithson. misc. Coll. 128 1 1955 : **Shoemaker, C. R.**

*Rivulogammarus pulex*, *R. pulex komareki*, *R. pulex fossarum*, *R. balcanicus*, *R. balcanicus daciensis*, *R. balcanicus montanus*, *R. kischineffensis*, *R. triacanthus*, all figd., **Cărausu, S., Dobreanu, E. & Manolache, C.**

Scelidae, Key to N.Z. genera, **Hurley, D. E.**

*Shablogammarus shablensis*, figd., **Cărausu, S., Dobreanu, E. & Manolache, C.**

*Sinoedicerus homopalmulus*, **gen. et sp. nov.** (Oedicerotidae ?) Coast of China, *Acta. Zool. Sinica* **7** 1955 p. 97 figs. : **Shen, C. J.**

Stegocephalidae, Key to genera, N. Zealand, **Hurley, D. E. (1).**

*Stenogammarus macrurus*, *S. compresso-similis*, figd., **Cărausu, S., Dobreanu, E. & Manolache, C.**

*Stenothoe barrowensis*, p. 26, **sp. nov.** Point Barrow, Alaska, figd., *Smithson. misc. Coll.* **128** 1 1955 : **Shoemaker, C. R.**; *S. gallensis*, fig., **Barnard, J. L. (3).**

*Stenothoides angusta*, p. 27, **sp. nov.** Point Barrow, Alaska, figd., *Smithson. misc. Coll.* **128** 1 1955 : **Shoemaker, C. R.**; *S. serripes*, **sp. nov.** Shikotan Isl., *Trav. Inst. zool. Acad. Sci. URSS.* **18** 1955 178 : **Guryanova, E. F.**

*Sympleustes quadridens*, **sp. nov.**, p. 200, Peter the Great Bay, N. Sea of Japan, *Trav. Inst. zool. Acad. Sci. URSS* **21** 1955 200 : **Bulicheva, A. I. (1)**; *S. uncigera*, *S. kariana*, figd., **Shoemaker, C. R.**

*Synchelidium maculatum* Sars, new to Irish Coasts, **Duhig, M. & Humphries, C. L.**

*Synopioides secunda*, figd., **Schellenberg, A.**

*Synurella ambulans*, *S. ambulans coeca*, *S. intermedia*, fill figd., **Cărausu, S., Dobreanu, E. & Manolache, C.**; *S. intermedia*, p. 631, **sp. nov.**, figs., *Bul. sti. Acad. Repub. rom. Sect. Biol.* **4** 3 1952 : **Dobreanu, E., Manolache, C. & Puscariu, V.**

*Talitrus saltator*, direction finding, **Pardi, L. & Grassi, M.**; sense of time, **Papi, E.**; *T. sylvaticus*, influence of body weight, temp. and season upon oxygen consumption, **Clark, D. P.**; *T. (Talitroides) sylvaticus*, taxonomic discussion, *T. (Talitroides) pacificus*, p. 155, **sp. nov.** Norfolk Island, N.Z., *Pacif. sci.* **9** 2 1955 figs : **Hurley, D. E. (2).**

*Talorchestia deshayesei*, direction finding, **Pardi, L. & Grassi, M.**

*Tetradieon crassum*, figd., **Hurley, D. E. (1).**

*Tetrynychia gigas*, p. 228, **sp. nov.**, *Trav. Inst. Okeanol.* **12** 1955 : **Birshstein, Y. A. & Vinogradov, M. E.**

*Tryphosa hōringii*, new to Irish coasts, **Duhig, M. & Humphries, C. L.**; *T. normalis*, p. 80, *T. africana*, p. 81, **spp. nov.**, figs., S. Africa, *Ann. S. Afr. Mus.* **43** 1 1955 : **Barnard, K. L. (4).**

*Typhlogammarus mrazeki hercegovinensis*, figd., **Karaman, S. L. (1).**

*Unciolella foveolata*, p. 97, **sp. nov.**, figs., S. Africa, *Ann. S. Afr. Mus.* **43** 1 1955 : **Barnard, K. H. (4).**

*Urothoe pulchella*, *U. grimaldii*, *U. serruidactylus*, p. 85, *U. pinnata*, p. 86, **spp. nov.**, *U. pinnata femoralis*, p. 87, **var. nov.** S. Africa, figs., *Ann. S. Afr. Mus.* **43** 1 1955 : **Barnard, K. H. (4).**

*Uschakovella*, p. 199, **gen. nov.**, *U. echinophora*, p. 200, **sp. nov.**, *U. echinophora abyssalis*, *U. echinophora echinophora*, p. 203, **forms. nov.** N. Pacific, *Trav. Inst. zool. Acad. Sci. URSS.* **18** 1955 : **Guryanova, E. F.**

*Vibilia stebbingi*?, figd., discussed, **Hurley, D. E.**

Vibiliidae, Key to N.Z. genera, **Hurley, D. E.**

Vitjazianidae, **fam. nov.** for *Vitjaziana*, p. 249, **gen. nov.**, *V. gurjanovae*, p. 250, **sp. nov.** Kurile-Kamchatka, *Trud. Inst. Okeanol.* **12** 1955 : **Birshstein, Y. A. & Vinogradov, M. E.**

## HYPERIIDEA

Hyperiidea, Key to N. Zealand genera, check list N.Z. species, etc., **Hurley, D. E.**; *Hyperia bengalensis*, *H. spinigera*, figd., **Hurley, D. E.**

*Hyperiopis laticarpa*, **sp. nov.** Kurile-Kamchatka depression, p. 233, *Trud. Inst. Okeanol.* **12** : **Birshstein, Y. A. & Vinogradov, M. E.**

*Hyperoche medusarium*, *H. mediterranea*, figd., **Hurley, D. E.**

Phronimidae, Key to N.Z. genera, **Hurley, D. E.**



*Phronima sedentaria*, figd., **Hurley**, D. E.

*Protohyperiopsis*, p. 236, **gen. nov.** for *P. arguata*, p. 237, **sp. nov.** Kurile-Kamchatka depression, Trud. Inst. Okeanol. 12 1955 : **Birshtein**, Y. A. & **Vinogradov**, M. E.

*Scina curilensis* **sp. nov.** Kamchatka straits, S.W. Bering sea, Olyutorsk Bay, Okjorsk sea, Kurile-Kamchatka depression, Zool. Zh. 35 2 1956 203 : **Vinogradov**, M. E. ; *S. orientalis*, **sp. nov.**, p. 1049, Pacific, 35° 43' N., 151° 13' W., C.R. Acad. Sci. Moscow 102 5 1955 : **Bulicheva**, A. I. (2).

*Vibihialaeca*, **sp. nov.**, p. 1050, Pacific near Kurile ridge, C.R. Acad. Sci. Moscow 102 5 1955 : **Bulicheva**, A. I.

### CAPRELLIDEA

*Paracyamus nodosus* parasitic on *Delphinapterus leucas*, the beluga, notes, **Margolis**, L.

*Syngamus*, **gen. nov.** (Cyamidae) for *S. pseudorca*, p. 315, **sp. nov.** on *Pseudorca crassidens*, Gulf of Mexico, figs., Bull. mar. Sci. Gulf of Caribbean 5 4 1955 : **Bowman**, T. E.

### INGOLFIELLIDEA

*Ingolfiella acherontis*, fig., **Karaman**, S. L. (1).

## ISOPODA

Isopoda, Azores, **Chapman**, G. ; **Chapman**, G. & **Santler**, J. E. ; English Channel, **Sueur**, Le R. F. ; British Coasts, **Prud'homme van Reine**, W. J. ; **Colman**, J. S. & **Segrove**, F. ; **Colman**, J. S. & **Segrove**, F. (1) ; Liège Lakes, **Leloup**, E., **Meel**, L. van & **Jacquemart**, S. ; Bohemia, **Lellák**, J. ; S. Europe, **Strouhal**, H. & **Franz**, H. ; Black Sea, **Pauli**, V. L. ; Arctic Ocean (ecology, etc.), **MacGinitie**, G. E. ; Florida and Texas, **Wurtz**, C. B. & **Romback**, S. S. ; Indo-China seas, **Dawydoff**, C.

Marine timber borers, **Srinivasan**, T. K. ; parasites on *Merluccius*, **Szidat**, L. ; deep sea, **Nordenstam**, A. ; subterranean, **Parenzan**, P.

## ASELLOTA

Asellota, N. Zealand waters, **Menzies**, R. J. & **Miller**, M. A. (1) ; Greece, **Karaman**, S. L. (2).

*Antias*, revision of genus, Key, A. *unirameus*, p. 385, **sp. nov.** N. Zealand waters, Trans. roy. Soc. N.Z. 2 1955 : **Menzies**, R. J. & **Miller**, M. A. (1).

*Asellus aquaticus*, heartbeat frequency, etc., **Schwartzkopff**, J. ; influence of temperature on moulting, ovary activity, and temporary sexual characters, **Balesdent-Marquet**, M.-L. (2) ; monogenia and hermaphroditism, figs., **Vitagliano-Tadini**, G. ; *A. aquaticus aquaticus*, *A. aquaticus arthrobranchialis*, figs., in Lago Maggiore, **Schmölzer**, K. ; *A. (Cavasellus) anophthalmus*, *anophthalmus*, *A. (C.) cavaticus cavaticus*, *A. (C.) anophthalmus longisetus*, *A. (C.) hercegovinensis*, *A. (C.) forelii*, *A. (C.) montenigrinus montenigrinus*, all figd., *A. (C.) montenigrinus macedonicus*, p. 14, *A. (C.) anophthalmus macedonicus*, p. 15, *A. (C.) anophthalmus radikanus*, p. 22, *A. (C.) anophthalmus serbicus*, p. 23, *A. (C.) anophthalmus dalmatinus*, p. 24, **spp. nov.**, *A. (Sabasellus) vidabonensis*, p. 32, **sp. nov.**, Greece and Yugoslavia, etc., Acta Mus. maced. Sci. nat. 3 1 1955 : **Karaman**, S. L. (5) ; *A. cavaticus*, biology and compar. with other subterr. forms, etc., figs., **Husson**, R. & **Daum**, J. ; *A. franciscocoli*, p. 170, Italy, *A. strinati*, p. 173, Turkey, *A. miurai*, p. 174, *A. aioii*, p. 178, Japan, **spp. nov.**, figs., Notes Biospéologiques X 1955 : **Chappuis**, P. A. (8) ; *A. (Baicalasellus) henroti*, p. 58, *A. (Baicalasellus) simonini*, p. 64, *A. (Baicalasellus) vandeli*, p. 69, **spp. nov.** Virginia, U.S.A., *A. (Proasellus) gauthieri*, *A. (Proasellus) alabamensis*, Arch. Zool. exp. gén. 92 Notes et Rev. 1955 : figs., **Bresson**, J. ; *A. (Proasellus) cavaticus*, photos, distrib. discussion, compar. with other spp., etc., **Brtek**, J. (1).

*Bathypsirus*, p. 205, **gen. nov.** (Parasellidae) for *B. nybelini*, p. 206, **sp. nov.** N. Atlantic, figs., Rep. Sw. Deep Sea Exped. 2 2 1955 : **Nordenstam**, A.

*Ianiropsis bisbidens*, p. 75, **sp. nov.** S. Africa, figs., Ann. S. Afr. Mus. 43 1 1955 : **Barnard**, K. H. (4).

*Janira maculosa*, chromosomes, figs., etc., **Staiger**, H. & **Bocquet**, C.

*Janiropsis breviremis*, chromosome studies, figs., etc., **Staiger**, H. & **Bocquet**, C.

*Microcharon latus*, *M. stygius*, figs., **Karaman**, S. L. (1); *M. major*, p. 108, **sp. nov.**, *M. latus prespensis*, p. 110, **sub. sp. nov.** Greece, figs., *Fragm. balcanica* 1 12 1954: **Karaman**, S. L. (2).

*Microjaera* **gen. nov.** p. 117 for *M. anisopoda* **sp. nov.**, p. 118, in *Microjanirinae* (Asellota) **sub. fam. nov.**, figs., discussion, etc., Roscoff, *Arch. Zool. exp. gén.* 92 Notes et Rev. 1955: **Bocquet**, C. & **Levi**, C.

*Microjanirinae* **sub. fam. nov.** (Asellota), see **Bocquet**, C. & **Levi**, C.

*Micropharassellus puteanus*, figd., **Karaman**, S. L. (1).

*Protojanira perbrincki*, **sp. nov.**, p. 249, Natal rivers, *Ann. Natal Mus.* 13 2 1955: figs., **Barnard**, K. H. (2).

*Stenasellus skopljensis croatica*, figd., **Karaman**, S. L. (1).

#### PHREATOICIDEA

Phreatoicoidea, ontogeny and affinities, discussion, **Dahl**, E. (3).

*Mesamphisopus capensis*, ontogeny, etc., **Dahl**, E. (3).

#### FLABELLIFERA

Flabellifera, Cumbræ, **Clark**, R. B. & **Milne**, A.; Travancore, **Pillai**, N. K. (1); Yugoslavia, **Karaman**, S. L. (4).

*Aega magnifica* on *Merluccius hubbsi*, **Szidat**, L.

*Anilocra mediterranea*, reaction of epidermis of *Crenilabrus* to this parasite, figs., etc., **Pflugfelder**, O.

*Artopoles capensis*, p. 72, **sp. nov.** S. Africa, figs., *Ann. S. Afr. Mus.* 43 1 1955: **Barnard**, K. H. (4).

*Cirolana imposita*, p. 52, *C. pilula*, p. 54, *C. capitella*, p. 54, **spp. nov.** S. Africa, figs., *Ann. S. Afr. Mus.* 43 1 1955: **Barnard**, K. H. (4).

*Conilorpheus scutifrons*, *C. blandus*, p. 58, **sp. nov.** S. Africa, figs., *Ann. S. Afr. Mus.* 43 1 1955: **Barnard**, K. H. (4).

*Corallana furcilla*, p. 59, **sp. nov.** S. Africa, figs., *Ann. S. Afr. Mus.* 43 1 1955: **Barnard**, K. H. (4).

†*Cyclosphaeroma remesi*, p. 268, *C. kettneri*, p. 269, **spp. nov.**, *C. woodwardi*, *C. uhligi*, *C. ind. spec. Jurrasic*, figs., S.B. öst. Akad. Wiss. Abt. 164 4-5 1955: **Bachmayer**, F.

*Cymodoce cryptodoma*, *C. lis*, p. 68, *C. aqis*, p. 69, **spp. nov.**, figs., S. Africa, *Ann. S. Afr. Mus.* 43 1 1955: **Barnard**, K. H. (4); *C. faxoni*, p. 293, **nov. comb.**, for *Exosphaeroma faxoni* Richardson, Atlantic, figd., and re-described, *Bull. mar. Sci. Gulf of Caribbean* 5 4 1955: **Menzies**, R. J. & **Miller**, M. A.; *C. japonica*, figd., discussed (in Japanese), **Shiino**, Z. M. (25).

*Eurydice pulchra*, *E. affinis*, *E. dollfusi*, figd., other spp. mentioned, ethology, ecology, systematics and biogeography, **Soika**, A. G.

*Exosphaeroma oregonsis*, figs., and discussed, **Shiino**, S. M. (25); "*Exosphaeroma*" *faxoni* see *Cymodoce faxoni*, **Menzies**, R. J. & **Miller**, M. A.

*Isocladus otion*, p. 63, *I. minetes*, p. 63, **spp. nov.**, figs., S. Africa, *Ann. S. Afr. Mus.* 43 1 1955: **Barnard**, K. H. (4).

*Lanocira latifrons*, figd., **Barnard**, K. H. (4).

*Limnoria*, biology, ecology, structure, etc., many figs., **Becker**, R. & **Kampf**, W. D.; *L. lignorum*, *L. andrewesi*, figd., discussed, **Shiino**, S. M. (42); *L. lignorum*, influence of hardness of woods, **Bourdillon**, A.; *L. tripunctata*, aggregation and burrow distrib., **Menzies**, R. J. & **Widrig**, T. M.

Limnoridae, resistance of woods in Hawaiian waters, figs., discussion, **Edmondson**, C. H.

*Livoneca convexa*, studies of biology, development, etc., figs., **Menzies**, R. J., **Bowman**, T. E. & **Alverson**, F. G.; *L. symmetrica* on *Carnegiella strigata* (Gasteropelecidae) imported from S. America, figs., **Reichenbach-Klinke**, H. H.

*Monolistraspinosa spinosa*, *M. spinosa spinosissima*, *M. caeca*, *M. caeca semiornata*, p. 127, **form nov.**, *M. hercegovinensis*, *M. hercegovinensis ornata*, p.

129, **form. nov.**, *M. (Typhlosphaeroma) racovitzi*, *M. (Typhlosphaeroma) berica* all figd., Yugoslavian waters, discussions, etc., *Acta Mus. maced. Sci. nat.* **2** 6 : **Karaman**, S. L. (4) ; *M. spinosa spinosissima*, fig., **Karaman**, S. L. (1).

*Paraciliacea teretron*, p. 70, *P. clavus*, p. 72, **spp. nov.** S. Africa, figs., *Ann. S. Afr. Mus.* **43** 1 1955 : **Barnard**, K. H. (4).

*Paracymothoa*, **gen. nov.**, p. 411, for *P. astyanaxi*, **sp. nov.** Brazil, figs., *Rev. bras. Biol.* **15** 4 1955 : **Castro**, A. L. de (3).

*Protosphaeroma straeleni*, p. 259, *P. strouhali*, p. 260, **spp. nov.**, *P. ernstbrunnense*, *P. jurense*, *P. strambergense*, Jurassic, figs., S.B. öst. Akad. Wiss. Abt. 1 **164** 4-5 1955 : **Bachmayer**, F.

*Sphaeramene microtylotos*, p. 66, **sp. nov.**, *S. polytylotos*, figs., S. Africa, *Ann. S. Afr. Mus.* **43** 1 1955 : **Barnard**, K. H. (4).

*Sphaeroma hookeri*, fig., **Margalef**, R. & **Balcells**, E. ; biology, growth, breeding, etc., figs., **Jensen**, J. P. ; *S. pulchellum*, *S. serratum*, figs., **Cărăușu**, A. (2) ; *S. serratum*, population study of British Coasts, map, **Hoestlandt**, H. (1) ; distribution, etc., map, **Hoestlandt**, H. ; *S. sieboldii*, *S. retrolaevis*, figd., discussed (in Japanese), **Shiino**, S. M. (25) ; *S. terebrans*, *S. walkerii*, *S. annandalei*, *S. annandalei travancorensis* **var. nov.**, p. 135, Travancore, Bull. Res. Inst. Univ. Travancore **4C** 1 1955 : **Pillai**, N. K. (1).

*Zuzara furcifer*, fig., **Barnard**, K. H. (4).

## GNATHIDEA

*Praniza milloti*, p. 91, **sp. nov.**, parasitic on *Latimeria chalumnae*, Mem. Inst. Sci. Madagascar **9A** 1955 : figs., **Monod**, T.

## ANTHURIDEA

*Haliophasma foveolata*, figd., **Barnard**, K. H. (4).

*Microcerberus adriaticus*, p. 143, **sp. nov.**, figs., Adriatic, *Fragm. balearica* **1** 16 1955 : **Karaman**, S. L. (3) ; *M. stygius*, fig., **Karaman**, S. L. (1).

*Paranthura latipes*, p. 51, **sp. nov.**, figs., S. Africa, *Ann. S. Afr. Mus.* **43** 1 1955 : **Barnard**, K. H. (4).

## VALVIFERA

*Antarcturus pacificus*, **sp. nov.** Bussolle Bay, Trav. Inst. zool. Acad. Sci. URSS. **21** 1955 228 : **Guryanova**, E. F. (1).

*Chiridotea almyra*, p. 225, **sp. nov.** N. American rivers, *C. coeca*, *C. tuftsi*, J. Wash. Acad. Sci. **45** 7 1955 : figs., **Bowman**, T. E. (2).

Idotheidae, U.S.S.R. marine species, **Kusakin**, O. G. ; British Coasts, **Naylor**, E. ; Mediterranean, figs., keys, **Cărăușu**, A. ; *Idotea*, diet and feeding mechanisms, structure of mouth parts, nutrition, figd., **Naylor**, E. (2) ; taxonomic value of maxillula, discussed, **Koepcke**, H.-W. ; *Idotea emarginata*, *I. neglecta*, *I. baltica*, *I. linearis*, *I. granulosa*, *I. pelagica*, *I. viridis*, ecology, Isle of Man, **Naylor**, E. ; revised taxonomy, etc., **Naylor**, E. (3) ; *I. emarginata*, life cycle, Port Erin, figs., **Naylor**, E. (1) ; *I. granulosa* maxillula, fig., **Koepcke**, H.-W. ; *I. linearis*, *I. baltica*, figs., **Prud'homme van Reine**, W. J. ; *I. metallica*, *I. baltica*, figd., variation, etc., Mediterranean, **Cărăușu**, A.

*Pleuropriion fabulosus*, **sp. nov.** Iturup I., Sea of Japan, Trav. Inst. zool. Acad. Sci. URSS. **21** 1955 225 : **Guryanova**, E. F.

*Stenosoma capito*, figd., **Cărăușu**, A.

*Synidothea bogorovi*, p. 223, *S. pavlovskii*, p. 209, *S. sculpta*, p. 217, **spp. nov.**, *S. sculpta bathyalis*, p. 221, **form. nov.** *S. spinosa anadyrensis*, p. 214 **sub. sp. nov.** Kurile-Sakhalin (Pacific), Trav. Inst. zool. Acad. Sci. URSS. **21** 1955 : **Guryanova**, E. F. (1) ; *S. laevidorsalis*, figs., **Shen**, C. J.

*Tridentella sculpturata*, **sp. nov.** Sea of Japan, Rebun Isl., Trav. Inst. zool. Acad. Sci. URSS. **18** 1955 228 : **Kusakin**, O. G.

## ONISCOIDEA

Woodlice, Mexico, **Rioja**, E. (1) ; S. America, **Gruner**, H.-E. ; N. America **Vandel**, A. (1) ; **Vandel**, A. (3) ; Europe, **Vandel**, A. (2) ; Greece, **Vandel**, A. ; **Strouhal**, A. ; **Butu-**



**rovic**, A. ; France (biogeogr.), **Legrand**, J.-J. (3) ; **Petit**, G. & **Schachter**, D. ; Prague wells, **Reháčková**, V. ; Atlantic Islands (paleogeogr.), **Legrand**, J.-J. (2) ; Woodlice, cutaneous respiration, **Edney**, E. B. & **Spencer**, J. O. ; transpiration, **Bursell**, E. ; hormones, **Legrand**, J.-J. ; hormone influence on oostegite develop., **Legrand**, J.-J. (1) ; genetics, population studies, **Lathin**, G. de ; biology, figs., **Cloudsley-Thompson**, J. L. ; growth, embryology, **Matsakis**, J. ; ecology, **Kuenen**, D. J. ; evolution, development, **Vandel**, A. (5) ; coxopodites, discussed, **Arcangeli**, A. ; woodlice (general), **Savory**, T. ; **Capart**, A.

*Acteoniscus*, **gen. nov.**, p. 55 (Trichoniscidae) for *A. petrochilosi*, **sp. nov.**, p. 57, figs., Greece, subterranean, Notes Biospéol. X 1955 : **Vandel**, A.

*Adoniscus*, **gen. nov.**, p. 481 for *A. velox*, **sp. nov.**, p. 482, Tripoli, Arch. Zool. exp. gén. 91 1955 : figs., **Vandel**, A. (3).

*Agabiformius orientalis*, figd., **Vandel**, A. (3).

*Alpioniscus* (*Alpioniscus*) *karamani damjanicus*, p. 118, **sub. sp. nov.**, A. (*Alpioniscus*) *slatinensis*, p. 119, **sp. nov.**, A. (*Alpioniscus*) *vejdovskyi*, figs., Greece, *Fragm. balcanica* 1 14 1955 : **Buturović**, A. ; *Alpioniscus*, sp., **Vandel**, A.

*Armadillidium* (*Duplocarinatum*) *album A. pulchellum*, figd., **Legrand**, J.-J. (3) ; *A. depressum*, follicle cells in relation to spermatogenesis, figd., etc., **Tadini**, G. V & **Solima**, A ; *A. vulgare*, ovariectomy on sinus gland, **Yamamoto**, Y.

*Armadillo troglophilus*, **sp. nov.**, p. 517, N. Africa, Arch. Zool. exp. gén. 91 1955 : figs., **Vandel**, A. (3).

*Benthana olfersii*, *B. picta*, *B. longicornis*, *B. sulcata*, p. 447, *B. pervensis*, p. 449, **spp. nov.**, *B. pauper*, all figd., *B. villosa*, describ., S. America, Zool. Jb. (Syst.), 83 1955 : **Gruner**, H.-E.

Berytoniscinae, **sub-fam. nov.**, *Berytoniscus singularis*, **sp. nov.**, p. 486, N. Africa, Arch. Zool. exp. gén. 91 1955 : figs., **Vandel**, A. (3).

*Chaelophiloscia elongata aramensis*, p. 490, *C. pseudocellaria coiffaiti*, p. 492, **sub. spp. nov.** N. Africa, Arch. Zool.

exp. gén. 91 1955 : figs., **Vandel**, A. (3) ; *C. pseudocellaria*, figs., **Vandel**, A.

*Cordioniscus africanus*, p. 65, **sp. nov.**, figs., N. Africa, Notes Biospéol. X 1955 : **Vandel**, A. (1) ; *C. laevis*, p. 447, **sp. nov.** Mexico, figs., An. Inst. Biol. Mex. 26 2 1955 : **Rioja**, E. (1).

*Epironiscellus*, p. 575, **gen. nov.** (Oniscoida) for *E. xerovunensis*, p. 576, **sp. nov.** Greece, figs., S.B. öst. Akad. Wiss. Abt. 1 163 8 1955 : **Strouhal**, H.

*Halophiloscia couchii adriatica*, secondary sex characters, figs., **Brian**, A.

*Haplophthalmus caecus*, p. 803, **sp. nov.**, Rumania, figs., Bul. sti. Acad. Repub. rom. Sect. Biol. 7 3 1955 : **Radu**, V. G. & V. V. & **Cadariu**, M. I. ; *H. danicus*, figd., Greece, **Strouhal**, H. ; *H. danicus rufocellatus*, **var. nov.** Ile d'Aix, France, no fig., p. 145, Mem. Mus. Hist. nat. Paris N.S. 6A 1954 : **Legrand**, J.-J. (3) ; *H. strinati*, p. 53, **sp. nov.**, figs., Greece, subterranean, Notes Biospéol. X 1955 : **Vandel**, A. ; *H. uniluberculatus*, p. 468, *H. stygiragus*, **sp. nov.** N. Africa, Arch. Zool. exp. gén. 91 1955 : figs., **Vandel**, A. (3)

*Hyloniscus beieri*, p. 564, **sp. nov.** W. Greece, figd., S.B. öst. Akad. Wiss. Abt. 1 163 8 1955 : **Strouhal**, H. ; *H. travnicensis*, p. 173, **sp. nov.**, *H. marginalis*, figd., Yugoslavia, Zool. Anz. 154 1955 : **Buturović**, A. (2).

*Ischioscia amazonica*, p. 52, **sp. nov.** S. America, Rev. bras. Biol. 15 1 1955 : figs., **Castro**, A. L. de (2).

*Libanonethes*, **gen. nov.**, p. 458, for *L. probosciferus*, p. 459, **sp. nov.** N. Africa, Arch. Zool. exp. gén. 91 1955 : figs., **Vandel**, A. (3).

*Libanoniscus* sp. ? figd., **Vandel**, A. (3).

*Ligia italica*, postembryonic dev., figs., **Matsakis**, J. (1).

*Ligidium* (*Ligiatium*) *epirense*, p. 561, **sp. nov.**, figs., W. Greece, S.B. öst. Akad. Wiss. Abt. 1 163 8 1955 : **Strouhal**, H.

*Mesoniscus alpicolus*, structure of stomach, figs., **Radu**, V. G. ; *M. alpicolus vulgaris*, p. 1, **sub. sp. nov.** Rumania, figs., Bul. sti. Acad. Repub. rom. Ser. Geol. 2 3 1950 ; **Radu**, V. G. (1).

*Metoponorthus pruisosus*, breeding habits, **Shimoizumi**, M. ; *M. cilicius*, *M. cilicius coiffaiti*, **sub. sp. nov.**, p. 502, N. Africa, Arch. Zool. exp. gén. **91** 1955 : figs., **Vandel**, A. (3).

*Nagurus hermonensis*, **sp. nov.**, p. 494, N. Africa, Arch. Zool. exp. gén. **91** 1955 : figs., **Vandel**, A. (3).

*Nesiotoniscus sebaouensis*, p. 68, **sp. nov.**, figs., N. Africa, Notes Biospéol. **X** 1955 : **Vandel**, A. (1).

*Orthometopon dalmatinum jonicum*, **sub. sp. nov.**, p. 590, *O. dalmatinum dalmatinum*, figs., Greece, S.B. öst. Akad. Wiss. Abt. 1 **163** 8 1955 : **Strouhal**, H.

*Platyarthrus beieri*, **sp. nov.**, p. 599, Greece, S.B. öst. Akad. Wiss. Abt. 1 **163** 8 1955 : **Strouhal**, H. ; *P. schöblii aiasensis*, p. 145, **var. nov.** Ile d'Aix, *P. costulatus*, figs., Mem. Mus. Hist. nat. Paris N.S. **6A** 1954 : **Legrand**, J.-J. (3) ; *P. schöbi kislarensis*, figd., **Vandel**, A. (3).

*Porcellio (Porcellio) epirensis*, **sp. nov.**, p. 595, *P. (Porcellio) achilleionensis*, Greece, *P. (Porcellio) peloponnesius*, figd., S.B. öst. Akad. Wiss. Abt. 1 **163** 8 1955 : **Strouhal**, H. ; *P. graecorum*, **sp. nov.**, p. 585, Greece, figs., S.B. öst. Akad. Wiss. Abt. 1 **163** 8 1955 : **Strouhal**, H. ; *P. laevis*, notes on biology, figs., **Mahmoud**, M. F. ; *P. obsoletus libanicus*, **sub. sp. nov.**, p. 511, N. Africa, Arch. Zool. exp. gén. **91** 1955 : figs., **Vandel**, A. (3) ; *P. succinctus*, systematic status, discussed, figs., **Vandel**, A. (4).

*Proporcellio quadriseriatus troglophilus*, **sub. sp. nov.**, p. 508, Tripoli, Arch. Zool. exp. gén. **91** 1955 : gs., **Vandel**, A. (3).

*Trachelipus (Trachelipus) palustris epirensis*, p. 577, *T. (Trachelipus) graecus epiroticus*, p. 580, **sub. spp. nov.**, *T. (Trachelipus) graecus graecus*, *T. (Trachelipus) phasacorum*, all figd., Greece, S.B. öst. Akad. Wiss. Abt. 1 **163** 8 1955 : **Strouhal**, H. ; *T. rathkei*, two chromatophorotropically active substances, **McWhinnie**, M. A. & **Sweeney**, H. M.

*Trichoniscus coiffaiti*, p. 466, **sp. nov.** Tripoli, Arch. Zool. exp. gén. **91** 1955 : figs., **Vandel**, A. (3) ; *T. gordonii*, p. 45, *T. jeanneli*, p. 47, **spp. nov.** S.

Europe, figs., Notes Biospéol. **X** 1955 : **Vandel**, A. (2) ; *T. peyerimhoffi*, p. 72, **sp. nov.**, figs. N. Africa, Notes Biospéol. **X** 1955 : **Vandel**, A. (1).

*Trichorhina boneti*, p. 451, **sp. nov.**, Mexico, figs., An. Inst. Biol. Mex. **26** 2 1955 : **Rioja**, E. (1) ; *T. vandeli*, p. 199, **sp. nov.**, fig., Mexico, An. Inst. Biol. Mex. **26** 1 1955 : **Rioja**, E. (2).

*Tylos*, suppression of *Tylos* Meigen 1800, and *Tylos* Heyden, 1826, and validation of *Tylos* Audouin 1826, **Opinion** 369.

*Venezillo chiapensis*, p. 206, **sp. nov.**, figs., Mexico, An. Inst. Biol. Mex. **26** 1 1955 : **Rioja**, E. (2).

*Xeroporcellio*, **gen. nov.**, p. 587 for *X. pandazisi*, **sp. nov.**, p. 588, Greece, figs., S.B. öst. Akad. Wiss. Abt. 1 **163** 8 1955 : **Strouhal**, H.

## EPICARIDEA

Epicaridea, morphological effects and metabolic disturbances of host, **Reinhard**, E. G.

*Apopenaenon takii*, p. 155, **sp. nov.**, *A. japonicum hiraizawai*, p. 154, on *Penaeopsis*, **var. nov.**, *A. japonicum*, all figd., Japanese waters, Jour. Mie Med. College, 1950 **1** : **Shiino**, S. M. (19).

*Athelges caudalis*, p. 77, **sp. nov.** S. Africa, figs., Ann. S. Afr. Mus. **43** 1 1955 : **Barnard**, K. H. (4).

*Bopyrella elongata*, p. 45, in branchial cavity of *Crangon*, *B. inoi*, p. 47, in branchial cavity of *Synalpheus*, **spp. nov.** Japanese waters, Bull. biogeogr. Soc. Japan **14** 1949 : figs., **Shiino**, S. M. (21) ; *B. hodgarti*, fig., **Barnard**, K. H. (4).

Bopyridae, phylogeny, diagr., **Shiino**, S. M. (20) ; effect on *Munida* sexual characters, figs., **Délys**, G. ; fossil Jurassic, **Bachmayer**, F.

*Cabircps*, affin. *marsupialis*, a hyperparasite of *Bopyrina virbii*, parasitic on *Hippolyte viridis*, life cycle, sex determination, many figs., etc., **Attardo**, C.

*Danalia hapalocarci*, p. 2447, **sp. nov.** on *Hapalocarcinus marsupialis*, Viet-Nam, figs., C.R. Acad. Sci. Paris **240** 25 1955 : **Fize**, A.

*Entionella okayamaensis*, p. 239, **sp. nov.** Japan, River Asahi, figs., Rep.

Fac. Fish. Univ. Mie 1954 : **Shiino**, S. M. (17).

*Mesocepon*, p. 36, **gen. nov.** Bopyridae for *M. toszimensis*, p. 37, **sp. nov.** from branchial cavity of *Arkania*, Japanese waters, figd., Rep. Fac. Fish. Pref. Univ. Mie 1951 1 : **Shiino**, S. M. (18).

*Miophrius*, p. 79, **gen. nov.** (Bopyridae) for *M. latreutidis*, p. 79, **sp. nov.** S. Africa, figs., Ann. S. Afr. Mus. 43 1955 : **Barnard**, K. H. (4).

*Orbione aristei*, p. 51, *O. izuensis*, p. 53, **spp. nov.** Japanese waters, figd., Bull. Biogeogr. Soc. Japan 14 1953 : **Shiino**, S. M. (23).

*Parapenaenella*, p. 57, **gen. nov.** Bopyridae for *P. distincta*, p. 59, **sp. nov.** from branchial cavity *Trachypenaeus*, Choshi fish market, Japan, Bull. biogeogr. Soc. Japan 1949 14 : figs., **Shiino**, S. M. (22).

*Parathelges enoshimensis*, p. 162, **sp. nov.** on *Eupagurus*, Japanese waters, figd., Jour. Mie Med. College 1950 1 : **Shiino**, S. M. (19).

*Parione pachychelii*, p. 157, **sp. nov.** on *Pachycheles*, Japanese waters, figd., Jour. Mie Med. College 1950 1 : **Shiino**, S. M. (19).

*Pseudione magna*, p. 29, from branchial cavity of *Heterocarpus*, *P. nephrops*, p. 32, from branchial cavity of *Nephrops*, figd., Japanese waters, Rep. Fac. Fish. Pref. Univ. Mie 1951 1 : **Shiino**, S. M. (18).

*Pseudionella*, p. 60, **gen. nov.** (Bopyridae) for *P. attenuata*, p. 62, **sp. nov.** from branchial cavity of *Eupagurus*, Seto, Bull. biogeogr. Soc. Japan 1949 14 : figs., **Shiino**, S. M. (22).

*Pseudostegias hapalogasteri*, p. 159, **sp. nov.** on *Hapalogaster*, Japanese waters, figd., Jour. Mie Med. College 1950 1 : **Shiino**, S. M. (19).

*Stegoalpheon Kempf*, figd., **Shiino**, S. M. (18).

*Tylocepon micippae*, p. 164, **sp. nov.** in branchial cavity of *Micippa*, Japanese waters, figd., Jour. Mie Med. College 1950 1 : **Shiino**, S. M. (19).

#### TANAIDACEA

Tanaidacea, W. African waters, **Lang**, K. ; Arctic Ocean, Ecology,

habits, etc., **MacGinitie**, G. E. ; Black Sea, **Pauli**, U. L. (1).

*Apseudes acutifrons*, *A. latreillii*, *A. grossimanus*, figd., **Lang**, K.

*Apseudopsis*, genus discussed, "*A. ostroumovi*", figd., **Lang**, K.

*Leptochelia mirabilis*, figd., **Barnard**, K. H. (4).

#### CUMACEA

Cumacea, British coast, **Colman**, J. S. & **Segrove**, F. (2) ; Benguela current, **Jones**, N. S. ; Arctic ocean, ecology, etc., **MacGinitie**, G. E. ; Indo-China seas, **Dawydoff**, C.

*Bodotria glabra*, p. 282, **sp. nov.** Benguela current, 'Discovery' Report 27 1955 : figs., **Jones**, N. S.

*Cambylaspis crisha*, p. 132, **sp. nov.** Peter the Great Bay, *C. costata speciosa* p. 131, **sub. sp. nov.** Seas of Japan, Trav. Inst. zool. Acad. Sci. URSS. 18 1955 : **Lomakina**, N. B.

*Diastylis hirsuta*, p. 142, *D. lazarevi*, p. 144, *D. loricata*, p. 146, *D. tetradon*, p. 148, **sp. nov.** Far Eastern Seas, Trav. Inst. zool. Acad. Sci. URSS. 18 1955 : **Lomakina**, N. B. ; *D. rufescens*, p. 288, **sp. nov.**, figs., Benguela Current, 'Discovery' Rep. 27 1955 : **Jones**, N. S.

*Eocuma dollfusii*, anatomical notes on male, figs., **Sueur**, Le R. F. (1).

*Eudorella dentata*, **sp. nov.** Bering sea near Karagin Isl., Trav. Inst. zool. Acad. Sci. URSS. 18 1955 122 : **Lomakina**, N. B.

*Eudorellopsis uschakovi*, **sp. nov.** Okhotsk sea at Penzhin mouth ; Tatar straits, Trav. Inst. zool. Acad. Sci. URSS. 18 1955 129 : **Lomakina**, N. B.

*Hemilamprops pectinata*, **sp. nov.** N.W. Okhotsk sea at Ion Isl., Nordvinov Bay and Aniva Vladimir Bay, Bays : Syaukhu, Peter the Great, Trav. Inst. zool. Acad. Sci. URSS. 18 1955 138 : **Lomakina**, N. B.

*Iphinoe fagei*, p. 285, **sp. nov.**, *I. brevipes*, *I. africana*, all figd., Benguela Current, Key to spp., 'Discovery' Rep. 27 1955 : figs., **Jones**, N. S.

*Leucon kohjakovae*, p. 115, *L. minor*, p. 119, **spp. nov.** Far Eastern Seas,



Trav. Inst. zool. Acad. Sci. URSS. **18** 1955 : **Lomakina**, N. B.

*Nakrokyllindrus abyssii*, **sp. nov.** Pacific, Trav. Inst. zool. Acad. Sci. URSS. **18** 1955 : **150**, **Lomakina**, N. B.

*Pavlovskieola campylaspoides*, **gen. et sp. nov.** Okhotsk Sea, p. 191, figs., **Lomakina**, N. B. (1).

*Upselaspis*, p. 284, **gen. nov.** for *Cyclospoides caparti* (Fage), Benguela Current, 'Discovery' Rep. **27** 1955 : figs., **Jones**, N. S.

## MYSIDACEA

Mysidacea nervous system, **Alexandrowicz**, J. S.

Mysidacea, Cumbræ, **Clark**, R. B. & **Milne**, A. ; British Coasts, **Colman**, J. S. & **Segrove**, F. (2) ; Arctic Ocean ecology, etc., **MacGinitie**, G. E. ; New Brunswick, **Klawe**, W. L. ; Texas, **Wurtz**, C. B. & **Rombach**, S. S.

*Acanthomysis longirostris* var. *sinensis*, **var. nov.** Coast of China, Acta. Zool. Sinica 1955 **7** p. 100 : figs., **Shen**, C. J.

*Amblyops durbani*, p. 104, Durban, A. antarctica, p. 106, S. Shetlands, **spp. nov.**, A. nr. *Kempfi*, figd., 'Discovery' Rep. **28** 1955 : **Tattersall**, O. S.

*Amblyopsoides*, **gen. nov.**, *A. obtusa*, p. 108, **sp. nov.** S.W. Falklands, figs., 'Discovery' Rep. **28** 1955 : **Tattersall**, O. S.

*Anchialina typica*, figd., **Tattersall**, O. S.

*Arthromysis magellanica*, figd., **Tattersall**, O. S.

*Boreomysis illigi*, p. 72, W. Cape Town, *B. tattersalli*, p. 77, W. Arabian Sea, *B. bispinosa*, p. 78, W. Cape Town, *B. insolita*, p. 80, S. Africa, *B. acuminata*, p. 82, Atlantic, all **spp. nov.** *B. plebeja*, all figd., 'Discovery' Rep. **28** 1955 : **Tattersall**, O. S.

*Caesaromysis hispida*, figd., **Tattersall**, O. S.

*Chalaraspidium alatum*, figd., **Tattersall**, O. S.

*Diamysis bahirensis*, figs., **Holmquist**, C.

*Erythropros africana*, p. 123, **sp. nov.** W. Africa, fig., 'Discovery' Rep. **28** 1955 : **Tattersall**, O. S.

*Eucopia linguicauda*, p. 56, **sp. nov.** W. Saldanha Bay, *E. australis*, *E. unguiculata*, *E. grimaldii*, *E. sp.*, all fig., 'Discovery' Rep. **28** 1955 : **Tattersall**, O. S.

*Gibberythropros megalops*, p. 116, **sp. nov.** W. Cape Town, figs., 'Discovery' Rep. **28** 1955 : **Tattersall**, O. S.

*Hansenomysis falklandica*, p. 61, **sp. nov.** N. Falkland Ids., *H. antarctica*, figs., 'Discovery' Rep. **28** 1955 : **Tattersall**, O. S.

*Heteroerythropros*, **gen. nov.** *H. purpura*, p. 121, **sp. nov.** W. Angra Pequena, 'Discovery' Rep. **28** 1955 : figs., **Tattersall**, O. S.

*Heteromysis actiniae*, **sp. nov.**, p. 1, Bahama Islands, discussed, Key, etc., Amer. Mus. Novit. 1716 1955 : figs., **Clarke**, W. D.

*Katerythropros resimora*, p. 119, **sp. nov.** W. Cape Town, figd., 'Discovery' Rep. **28** 1955 : **Tattersall**, O. S.

*Leptomysis gracilis*, parasitized with *Amallocystis boschmai*, figs., **Nouvel**, H. & **Hoenigman**, J.

*Longithorax capensis*, figd., **Tattersall**, O. S.

*Lophogaster challengerii*, *L. rotundatus*, *L. schmidtii*, figs., **Tattersall**, O. S.

*Mesopodopsis orientalis*, figd., **Kow**, Ah T.

*Mysidetes microps*, p. 145, S. Georgia, *M. macrops*, p. 147, *M. intermedia*, p. 149, *M. patagonica*, p. 151, Falklands, *M. anomala*, p. 153, Magellan Str., *M. dimorpha*, p. 153, Cumberland Bay, all **spp. nov.**, *M. crassa*, all figd., 'Discovery' Rep. **28** 1955 : **Tattersall**, O. S.

*Mysidopsis camelina*, p. 160, **sp. nov.** S. Africa, *M. schultzei*, *M. similis*, *M. acuta*, all fig., 'Discovery' Rep. **28** 1955 : **Tattersall**, O. S.

*Mysis australe*, p. 167, **sp. nov.** S. Georgia, figs., 'Discovery' Rep. **28** 1955 : **Tattersall**, O. S. ; "*Mysis relicta*", discussion and identity, with *Diamysis bahirensis* and *Paramysis helleri*, figs., **Holmquist**, C.

*Neomysis patagona*, *N. monticellii*, figd., **Tattersall**, O. S.; *N. vulgaris*, biology and ecology, reproduc., embryology, etc., figs., **Kinne**, O.

*Paramblyops brevirostris*, p. 112, **sp. nov.** **Palmer's Archipelago**, figd., 'Discovery' Rep. 28 1955: **Tattersall**, O. S.

*Paramysis helleri*, figs., **Holmquist**, C.

*Petalophthalmus oculatus*, figd., **Tattersall**, O. S.

*Praunus flexuosus*, innervation of heart, figs., **Alexandrowicz**, J. S.; ocular muscles, figs., **Mayrat**, A.

*Pseudomma affine*, New Brunswick, **Klawe**, W. L.; *P. calmani*, p. 95, Falkland, *P. schollaertensis*, p. 97, *P. longicaudum*, p. 98, **Palmer's Archipelago**, *P. magellanensis*, p. 100, Magellan Str., *P. minutum*, p. 101, Falklands, all **spp. nov.**, figs., 'Discovery' Rep. 28 1955: **Tattersall**, O. S.

*Rhopalophthalmus egregius*, figd., **Kow**, Ah T.

*Troglomysis vjetrenicensis*, fig., **Karaman**, S. L. (1).

### THERMOSBAENACEA

Thermosbaenacea, relationships discussed, **Siewing**, R.

### ANASPIDACEA

Anaspidacea, S. Europe, **Franz**, H.; Anaspidacea, relationships discussed, figs., anatomy, etc., **Siewing**, R.

†*Gamposonychus fimbriatus*, figd., **Siewing**, R.

*Paranaspides lacustris*, figd., **Siewing**, R.

### BATHYNELLACEA

Bathynellids, Yugoslavia, **Karaman**, S. L.

*Bathynella natans*, history, etc., fig., **Cloudsley-Thompson**, J. L. (2); *B. natans skopljensis*, *B. natans slovenica*, p. 75, **sub. sp. nov.** Yugoslavia, discussed, figd., etc., **Fragm. balcanica** 1 8 1954: **Karaman**, S. L.

*Monodella argentarii*, behaviour and development, from Italian cave, **Stella**, E. (1); *M. halophila*, figd., **Karaman**, S. L. (1).

*Parabathynella fagei*, figd., **Siewing**, R.; *P. phreatica*, figd., **Karaman**, S. L. (1).

*Thermobathynella leleupi*, p. 81, **sp. nov.** Tanganyika, figs., discussion, Notes Biospéologiques X 1955: **Dela-mare-Deboutteville**, C. & **Chappuis**, P. A.

### NEBALIACEA

Leptostraca, gut haemochromogens, **Phear**, E. A.

*Nebalia bipes*, eating fish on the hook, photo., **Heldt**, J. H.

### CIRRIPEDIA

Glossary of cirripede terms, **Cornwall**, I. E.

Deep sea cirripedes, **Dahl**, E. (4), **Nilsson-Cantell**, C. A.; Azores, **Chapman**, G. & **Santler**, J. E.

Gut haemochromogens, cf. cirripedes, **Phear**, E. A.

Behaviour of barnacles on their larvae, **Crisp**, D. J.; **Knight Jones**, E. W.; **Southward**, A. J.

Ecology of Japanese Cirripedes, **Utinomi**, H. (1).

Hatching of barnacles, **Barnes**, H. (2).

Spawning seasons of Barnacles, **Bousfield**, E. L. (1).

Faunistic works, **Bousfield**, E. L. (2); **Cornwall**, I. E. (2); **Dawydoff**, C.; **Fischer-Piette**, E.; **Jefferson**, G. T.; **Leféure**, P. & **Lucas**, G.; **MacGinitie**, G. E.; **Sueur**, Le R. F.; **Ticehurst**, N. F.; **Utinomi**, H.; **Wurtz**, C. B. & **Romback**, S. S.

Fossil Cirripedia, **Bernhauser**, A.; **Davadie**, C. & **Emberger**, J.

### THORACICA

#### OPERCULATA

*Balanus cariosus*, *B. nubilis*, *B. crenatus*, *B. glandulus*, *B. rostratus alaskensis*, *B. engbergi*, *B. balanus*, *B. hesperius levidomus*, figs., **Cornwall**, I. E.; *B. balanus*, *B. cariosus*, *B. crenatus*, *B. engbergi*, *B. glandulus*, *B. hesperius*, *B. nubilis*, *B. rostratus*, **Cornwall**, I. E. (2); *B. balanoides*, growth rate, **Barnes**, H. (1).

†*Balanus concavus*, *B. tulipiformis*, figs., Pliocene, Greece, **Boenzi**, S.; *B. nubilus*, fig., **Shikama**, T.

†*Catophragmus* (*Pachydiadema*) *cretaecum*, figs., **Carlsson**, J. G.

*Chthamalus dalli*, figs., **Cornwall**, I. E., I. E. (2); *Ch. malayensis*, *C. pilsbryi*, figs., **Utinomi**, H. (2).

*Coronula diadema*, *C. reginae*, figs., **Cornwall**, I. E., I. E. (2).

*Elminius modestus*, recorded from Cumbrae, **Connell**, J. H.; breeding observations, **Crisp**, D. J. & **Davies**, P. A.

*Xenobalanus globicipitus*, fig., **Cornwall**, I. E., I. E. (2).

#### PEDUNCULATA

*Alepas lankesteri*, **sp. nov.** West Indies, Ann. Mag. Nat. Hist. (7) 6 1900 p. 195 figs.: **Gruvel**, A.

†*Brachylepas fallax*, *B. maissanti*, *B. guascoi*, figs., **Carlsson**, J. G.

†*Calantica* (*Scillaelepas*) *valida*, *C. (S.) milsoni*, *C. (S.) caelata*, *C. (S.) scanica*, *C. (S.) ifoensis*, *C. (S.) angulata*, figs., **Carlsson**, J. G.

*Conchoderma auritum*, *C. virgatum*, figs., **Cornwall**, I. E., I. E. (2); *C. hunteri*, note, **Barnard**, K. H. (1).

†*Cretiscapellum glabrum*, *C. semiporcatum*, *C. striatum*, *C. striatum* var. *dissimile*, figs., **Carlsson**, J. G.

*Cryptolepas rachianecta*, fig., **Cornwall**, I. E., I. E. (2).

*Lepas*, Key to spp. *L. anatifera*, *L. anserifera*, *L. pectinata*, *L. hilli*, *L. nonfurcata*, *L. australis*, *L. fascicularis*, figs., **Graaf**, F. de; *L. anatifera*, *L. hilli*, *L. pectinata pacifica*, *L. fascicularis*, figs., **Cornwall**, I. E.; *L. anatifera*, *L. fascicularis*, *L. hilli*, *L. pectinata* var. *pacifica*, figs., **Cornwall**, I. E. (2); *L. anatifera*, photo., **Forest**, J. (1).

*Mitella polymerus*, fig., **Cornwall**, I. E., I. E. (2).

*Pollicipes*, musculature, **Castaño**, J. J.

†*Pycnolepas ignabergensis*, **sp. nov.** Cretaceous, Sweden, Acta. Univ. lund. N.F. 49 1954 p. 23: figs., **Carlsson**, J. G.

*Scapellum columbianum*, fig., **Cornwall**, I. E., I. E. (2); *S. pentagonum*, **sp. nov.** 40° N., 45° W., 4,540–4,600 m., p. 215, figs., **Nilsson-Cantell**, E. A.

†*Scapellum* (*Arcoscapellum*) *fossula*, *S. (A.) maximum*, *S. (A.) maximum* var. *solidulum*, var. *sulcatum*, *S. (A.) elongatum*, *S. (A.) danicum*, *S. (A.) undulatum*, figs., **Carlsson**, J. G.

†*Stramentum* (*Loricula*) *saadensis*, **sp. nov.**, p. 401, figs., Albien, Algeria, *S. haworthi*, fig., Bull. Publ. Serv. Carte. géol. Alger. (N.S.) No. 5 1954: **Davadie**, C. & **Emberger**, J.

*Tripetesa lateralis*, description, figs., **Tomlinson**, S. T.

#### ACROTHORACICA

†*Zaphella pattei*, **gen. et sp. nov.** Lias, France, Bull. Soc. géol. Fr. (6) 4 1954 p. 447: figs., **Saint-Seine**, R. de

#### ASCOTHORACICA

[No record]

#### RHIZOCEPHALA

Revision of the Sacculinidae, Keys to genera and species, **Boschma**, H. (7).

Rhizocephalan parasites of *Thalassidroma crenata* from Indo-China, **Boschma**, H. (1).

Rhizocephala, morphological effects produced, and metabolic disturbances of host, discussion, etc., **Reinhard**, E. G.

Rhizocephala of Arctic Ocean, ecology, etc., **MacGinitie**, G. E.

*Heterosaccus papillosus*, parasite on *Charybdis japonica*, discussion and figs., **Matsumoto**, K.; *H. ruginosus*, figs., **Boschma**, H. (1).

*Loxothylacus brachythrix*, fig., **Boschma**, H. (1); *L. kossmanni*, **sp. nov.** New Guinea, p. 25 figs., **Boschma**, H. (5); *L. variabilis*, figs., **Boschma**, H. (6).

*Mycetomorpha vancouverensis*, note, **Butler**, T. H.

*Peltogastrella socialis*, parasitic on *Eupagurus ochotensis*, **Oguro**, C.

*Sacculina leptodiae*, fig., **Boschma**, H. (1); *S. loricata*, **sp. nov.**, parasitic on



*Cymopolia whitei*, East Indies, Proc. Akad. Wet. Amst. 58C 1955 p. 273 : figs. 1-4, **Boschma**, (2) ; *S. gerbei*, description, figs., **Boschma**, H. (3) ; *S. reinhardi*, sp. nov., p. 237, figs., parasitic on *Pugettia brevirostris* from Japan, *S. gracilis*, figs., Zool. Meded. 33 1955 : **Boschma**, H. (4) ; *S. carinata*, figs., **Boschma**, H. (5).

## CEPHALOCARIDA

Cephalocarida, new subclass, for *Hutchinsoniella macracantha* gen. et sp. nov., p. 61, **Sanders**, H. L.

*Hutchinsoniella macracantha*, gen. et sp. nov. Long Island Sound, necessitating a new sub-class the Cephalocarida, Proc. nat. Acad. Sci. 41 1955 : 61 figs., **Sanders**, H. L.

Hutchinsoniellidae, fam. nov., p. 61, **Sanders**, H. L.

## COPEPODA

Vertical migration of fresh water copepods, **Cushing**, D. H.

Predation and selection, **Tonolli**, V.

Harm caused to young fish by *Cyclops*, **Oliva**, O. & **Sládeček**, V.

Quantitative filter feeding, **Jørgensen**, C. B.

Hatching, **Marshall**, S. M. & **Orr**, A. P. (2).

Two forms of sperm in Copepods, **Heberer**, G.

Marine Copepods, **Anraku**, M. ; **Baker**, A. de C. ; **Božic**, B. (1) ; **Brodsky**, K. A. (1) (2) ; **Chapman**, G. ; **Chappuis**, P. A. (4) ; **Colman**, J. S. & **Segrove**, F. (2) ; **Dahl**, E. (4) ; **MacGinitie**, G. E. ; **Delamare-Deboutteville**, C. (1), (3) ; **Fontaine**, M. ; **Fraser**, J. H. ; **Motoda**, S. & **Anraku**, M. (1), (3) ; **Østvedt**, O. J. ; **Petkovski**, T. K. ; **Roe**, K. M. ; **Shen**, C. J. ; **Sueur**, R. F. le.

Fresh-water Copepods, **Bănărescu**, P. & **Șerban**, M. ; **Bangham**, R. V. & **Adams**, J. P. ; **Bardach**, J. E. ; **Brehm**, V. (1)-(4) ; **Canicci**, G. (2) ; **Chapman**, G. & **Santler**, J. E. ; **Chappuis**, P. A. (1-7, 9-10) ; **Comita**, G. W. &

**Edmondson**, W. T. ; **Damas**, H. ; **Davis**, C. C. ; **Dittmar**, H. ; **Facinelli**, E. ; **Fincher**, J. A. & **McGinty**, M. S. ; **Franz**, H. ; **Fryer**, G. (1-2) ; **Galliford**, A. L. ; **Gotto**, R. V. (1) ; **Harding**, J. P. (1) ; **Herbst**, H. V. ; **Joly**, R. ; **Kiefer**, F. (1, 2, 3, 6) ; **Kleerekoper**, H. ; **Lellák**, J. ; **Leloup**, E., **Meel**, L. van & **Jacquemart**, S. ; **Lindberg**, K. (1, 3-4) ; **Löffler**, H. ; **Margalef**, R., R. (1) ; **Moroni**, A. (1) ; **Nakai**, Z. & **Honjo**, K. ; **Noodt**, W., W. (1-4) ; **Oliveira**, L. de ; **Pennak**, R. W., R. W. (1) ; **Ravera**, O. ; **Schwoerbel** ; **Sebestyen**, O. ; **Sládeček**, V. (1) ; **Sládeček**, V. & **Řeháčková**, V. ; **Smyly**, W. J. P. (2) ; **Štěrba**, O. ; **Thomasson**, K. ; **Wilson**, M. S. ; **Delamare-Deboutteville**, C. (1, 3) ; Subterranean and interstitial copepods, **Chappuis**, P. A. (4, 5, 6) ; **Delamare-Deboutteville**, C., **Gerlach**, S. & **Siewing**, R. ; **Noodt**, W. (1-5).

Parasitic Copepods, **Barnard**, K. H. (3, 4) ; **Bangham**, R. V. & **Adams**, J. P. ; **Borovitzkaya**, M. P. ; **Brandes**, C.-H. ; **Butzkaya**, N. A. ; **Causey**, D. ; **Delamare-Deboutteville**, C. & **Nunes-Ruivo**, L. P. (1-3) ; **Heegaard**, P. ; **Humes**, A. G. (1) ; **Rangnekar**, M. P. ; **Romanovsky**, A. ; **Ruting**, J. & **Stock**, J. H. ; **Shiino**, S. M. (1-4, 6-8, 14-15) ; **Stock**, J. H. (1) ; **Szidat**, L.

## CALANOIDA

Key to calanoid nauplii in marine plankton, **Ogilvie**, H. S.

*Acartia clausi gaboensis*, biology, distribution, **Rahm**, U.

*Aetidius*, sp., figs., **Brodsky**, K. A. (4).

*Anomalocera patersoni*, Innervation of retinal cells, fig., **Vaissière**, R.

*Arctodiaptomus valachicus*, sp. nov. Romania, Bul. Inst. Cercet. Pisc. 13 1954 : 43, figs., **Bănărescu**, P. & **Șerban**, M.

*Boeckella camjatae*, p. 221, figs., *B. titicacae*, p. 230, figs., spp. nov. Peru, *B. occidentalis*, figs., Trans. Linn. Soc. Lond. (3) 1 1955 : **Harding**, J. P. (1) ; *B. kinzeli*, p. 728, sp. nov., *B. poopanensis*, *B. occidentalis*, figd.,

Peru, other spp. describ., discussed, etc., S.B. öst. Akad. Wiss. Abt. 1 **164** 9 1955 : **Löffler, H.**

*Calamoecia lucasi*, descr., figs., **Jolly, V. H.**

*Calanipedia aquae-dulcis*, photo., **Sommani, E.**

*Calanus finmarchicus*, *C. helgolandicus*, *C. pacificus*, descr., figs., *C. glacialis*, **sp. nov.**, p. 1211, figs., Arctic seas, *Calanus helgolandicus* var. *ponticus*, **var. nov.**, p. 1216, figs., Black Sea. Distribution of all the spp., Zool. Zh. Moscow **34** 1955 : **Jashnov, W. A.** (1) ; *C. lighti*, **sp. nov.** N.W. Pacific, p. 414, figs., *C. tenuicornis*, figs., **Bowman, T. E.** (3) ; *C. finmarchicus*, biology, review of literature, **Marshall, S. M. & Orr, A. P.** ; Feeding experiments with labelled phytoplankton, **Marshall, S. M. & Orr, A. P.** (1) ; Hatching, figs., **Marshall, S. M. & Orr, A. P.** (2) ; Feeding, assimilation and excretion, **Marshall, S. M. & Orr, A. P.** (3) ; Biology in Ungava Bay, **Fontaine, M.** ; Triploid nauplius, figs., **Harding, J. P. & Marshall, S. M.**

*Derjuginia*, **gen. nov.**, p. 3 and 7, for *Scolecithrix tolli* Linko, Bull. Soc. nal. Moscow Biol. **52** (4) 1947 : **Jashnov, W. A.**

*Diaptomus rostripes*, **sp. nov.** Germany, p. 248, figs., **Herbst, H. V.** (1) ; *D. (Aglaiodiaptomus) clavipoides*, **sp. nov.** Louisiana, Tulane Stud. Zool. **3** 1955 p. 38, figs., *D. clavipes*, fig. 1, **Wilson, M. S.** ; *D. castor*, *D. castaneti*, N.W. Spain, figs., **Margalef, R.** ; *D. vulgaris*, nomenclature, **Gurney, R.** ; Note on Irish spp. of *Diaptomus*, **Farran, G. P.**

*Epischura massachusettsensis*, larval stages, figs., **Humes, A. G.**

*Eudiaptomus gracilis*, fig., **Kiefer, F.** ; *E. chappuisi*, figs., **Kiefer, F.** (2).

*Hemidiaptomus (Gigantodiaptomus) maroccanus*, **sp. nov.**, p. 323, figs., *H. (G.) ingens inermis*, **subsp. nov.**, p. 327, figs., Morocco, *H. ingens ingens*, figs., Bull. Soc. Sci. nat. phys. Maroc. **34** 1954 : **Kiefer, F.** (2) ; *H. hungaricus*, fig., **Bănărescu, P. & Șerban, M.**

*Hetercope borealis*, fig., **Kiefer, F.**

*Heterorabdus compactus*, figs., **Brodsky, K. A.** (4).

*Leptodiaptomus sicilioides*, fig., **Brehm, V.** (4).

*Lucicutia ushakovi*, **sp. nov.** Kurile-Kamchatka depression, Trud. Inst. Oceanogr. Akad. Nauk. SSSR. **12** 1955 p. 204 figs., **Brodsky, K. A.** (4).

*Mastigodiaptomus albuquerquensis*, figs., *M. montezumae*, **sp. nov.**, p. 415, figs., Mexico Öst. zool. Zeitsch. **4** 1955 : **Brehm, V.** (4).

*Maxodiaptomus kupelwieseri*, notes, **Brtek, J.** (2).

*Metadiaptomus chevreauxi*, figs., **Kiefer, F.** (2).

*Mixodiaptomus laciniatus atlantis*, **subsp. nov.** Morocco, p. 329, figs., *M. laciniatus laciniatus*, figs., Bull. Soc. Sci. nat. phys. Maroc. **34** 1954 : 317-336, **Kiefer, F.** (2).

*Parascaphocalanus*, **gen. nov.**, p. 195, type species, *P. zenkevitchi*, **sp. nov.**, p. 195, figs., Kurile-Kamchatka depression (Scolecithricidae). Trud. Inst. Oceanogr. Akad. Nauk. SSSR. **12** 1955 : **Brodsky, K. A.** (4).

*Pareuchaeta pavlovskii*, **sp. nov.** Southern part of Behring sea, p. 187, **Brodsky, K. A.**

*Pseudoboeckella calcaris*, p. 232, figs., *P. palastris*, p. 233, figs., **spp. nov.**, Peru, Trans. Linn. Soc. Lond. (3) **1** 1955 : **Harding, J. P.** (1) ; *P. peruiensis*, p. 724, **sp. nov.**, figs., Peru, S.B. öst. Akad. Wiss. Abt. 1 **164** 9 1955 : **Löffler, H.**

*Pseudocalanus minutus*, biology, **Fontaine, M.**

*Pseudochirella gurjanovae*, **sp. nov.** Kurile-Kamchatka depression, Trud. Inst. Oceanogr. Akad. Nauk SSSR. **12** 1955 : p. 189, figs., **Brodsky, K. A.** (4).

*Pseudodiaptomus batillipes*, **sp. nov.** Madagascar, S.B. öst. Akad. Wiss. Abt. 1 **163** 1955 : p. 603, figs., **Brehm, V.** (5).

*Scaphocalanus bogorovi*, **sp. nov.** Kurile Kamchatka depression, Trud. Inst. Oceanogr. Akad. Nauk SSSR. **12** 1955 : p. 193, figs., **Brodsky, K. A.** (4).

*Schmackeria poplesia*, **sp. nov.** Coast of China, Acta. Zool. Sinica **7** 1955 : p. 95, figs., **Shen, C. J.**

*Scolecithricella vespertina*, **sp. nov.** Sea of Japan, p. 117, figs., **Tanaka**, O.

*Scolecithrix birshsteini*, **sp. nov.**, p. 198, figs., *S. b. f. minor*, **f. nov.**, p. 199, figs., Kurile Kamchatka depression, Trud. Inst. Oceanogr. Akad. Nauk SSSR. **12** 1955 : **Brodsky**, K. A. (4).

*Sinocalanus sinensis*, figs., **Shen**, C. J.

*Spinocalanus similis*, var. *profundalis*, **var. nov.** Kurile Kamchatka depression, Trud. Inst. Oceanogr. Akad. Nauk SSSR. **12** 1955 : p. 185, figs., **Brodsky**, K. A. (4).

*Tortanus vermiculus*, **sp. nov.** Coast of China, Acta Zool. Sinica **7** 1955 : p. 96, figs., **Shen**, C. J.

*Tropodiatomus imitator*, **sp. nov.** Central Africa, Anz. math. nat. Kl. Öst. Akad. Wiss. 1955 : 245, figs., **Brehm**, V. (2).

*Xanthocalanus pavlovskii*, **sp. nov.** Kurile Kamchatka depression, Trud. Inst. Oceanogr. Akad. Nauk SSSR. **12** 1955 : p. 191, figs., **Brodsky**, K. A. (4).

*Zenkevitchiella*, **gen. nov.** p. 205, type species, *Z. abyssalis*, **sp. nov.**, p. 206, Kurile Kamchatka depression, Trud. Inst. Oceanogr. Akad. Nauk SSSR. **12** 1955 : **Brodsky**, K. A. (4).

## HARPACTICOIDA

*Ameira parvula*, fig. 5, **Božić**, B. (1) ; *A. pestae*, **sp. nov.** Adriatic, Fragm. balcanica **1** 1955 : p. 132, figs., **Petkovski**, T. K.

*Amonardia similis*, figs., **Noodt**, W. (4).

*Amphiascoides brevifurca*, *A. subdebilis*, figs., **Noodt**, W. (2).

*Amphiascus angustipes*, *A. parvus*, figs., **Noodt**, W. (2).

*Arenopontia acantha*, **sp. nov.** Mediterranean coastal sand, Vie et Milieu **4** 1954 : p. 268, figs., **Chappuis**, P. A. (11) ; *A. longiremis*, p. 54, **sp. nov.** Madagascar, figs., Key to spp., etc., Mem. Inst. Sci. Madagascar, **9A** 1955 : **Chappuis**, P. A. (3) ; *A. subterranea*, fig., **Delamare-Deboutteville**, C. (2).

*Arenosetella incerta*, p. 256, *A. pectinata*, p. 258, **spp. nov.** sand interstitial fauna, Mediterranean coasts,

Vie et Milieu **4** 1954 : figs., **Chappuis**, P. A. (11) ; *A. germanica*, figd., **Božić**, B. (1) ; **Chappuis**, P. A. (3) ; **Delamare-Deboutteville**, C. (2).

*Asellopsis arenicola*, p. 60, **sp. nov.**, figs., Madagascar, Mem. Inst. Sci. Madagascar **9A** 1955 : **Chappuis**, P. A. (3).

*Attheyella (Delachauxiella) clavigera*, p. 234, figs., *A. (D.) inconstans*, p. 235, figs., **spp. nov.** Peru, *A. cf. ensifer*, figs., Trans. Linn. Soc. Lond. (3) **1** 1955 : **Harding**, J. P. (1) ; *A. wulmeri osmana*, **subsp. nov.** Turkey, Hydrobiol. Istanbul **2B** 1955 : p. 128, figs., **Kiefer**, F. (3) ; *A. trispinosa*, N.W. Spain, figs., **Margalef**, R.

*Bradyellopsis subniger*, fig., **Noodt**, W. (2).

*Bryocamptus (Rheocamptus) zschokkei* var. *apilosus*, **var. nov.** Přírod. Sborn. Ostravsk. Kraje **16** 1955 p. 52, figs., **Štěrbá**, O.

*Canthocamptus staphylinus microstaphylinus*, figs., **Kiefer**, F. (3).

*Diagoniceps monodi*, **sp. nov.** off Dakar, Bull. Inst. Afr. noire **17** 1955 : p. 1020, figs., **Chappuis**, P. A. & **Kunz**, H.

*Ectinosoma reductum*, **sp. nov.** sand at Roscoff, Arch. Zool. exp. gén. **92** Notes et Res. 1955 : p. 2, figs., **Božić**, B. (1).

*Elaphoidella crassa*, p. 218, figs., Assam, *E. brevifurcata*, p. 220, figs., Calicut, **spp. nov.**, Bull. Soc. Hist. nat. Toulouse **89**, **Chappuis**, P. A. (2) ; *E. aberrans*, p. 63, **sp. nov.**, figs., Madagascar, Mem. Inst. Sci. Madagascar **9A** 1955 : **Chappuis**, P. A. (3) ; *E. varians*, **sp. nov.** Greece, Notes biospeolog. **10** 1955 : p. 94, figs., **Chappuis**, P. A. (6) ; *E. taroi*, **sp. nov.** Fiji Is., Notes biospeolog. **10** 1955 : p. 98, figs., **Chappuis**, P. A. (7) ; *E. miurai*, p. 183, figs., *E. Aioii*, p. 186, figs., **spp. nov.** Japan, subterranean, Notes biospeol. **10** 1955 : **Chappuis**, P. A. (9).

*Esola longicauda*, fig., **Noodt**, W. (2).

*Eudactylopus latipes*, figs., **Noodt**, W. (2).

*Haloschizopera marmarae*, **sp. nov.** Sea of Marmara, Rev. Fac. Sci. Univ.



Istanbul, **20B** 1955 : p. 75, figs., **Noodt**, W. (2).

*Heterolaophonte strömi* f. *paraminuta*, f. **nov.** Sea of Marmara, Rev. Fac. Sci. Univ. Istanbul **20B** 1955 : p. 89, figs., **Noodt**, W. (2) ; *H. strömi* ssp. *breviceaudata*, figs., **Noodt**, W. (4).

*HorsIELla brevicornis*, fig., **Margalef**, R. & **Balcells**, E.

*Idyanthopsis*, p. 2, **gen. nov.** [Harpacticoida] for *I. psammophila*, p. 3, **sp. nov.** sand at Roscoff, figs., descript., Arch. Zool. exp. gén. **93** (Notes et Rev.) 1955 : **Bocquet**, C. & **Božić**, B.

*Laophonte inornata*, figs., **Noodt**, W. (2) ; *L. adriatica*, **sp. nov.** Adriatic, Fragn. balcanica **1** 1955 : p. 135, figs., **Petkovski**, T. K.

*Laophontina brevipes*, p. 58, **sp. nov.** Madagascar, figs., Mem. Inst. Sci. Madagascar **9A** 1955 : **Chappuis**, P. A. (3).

*Lepastacus aberrans*, **sp. nov.** Mediterranean coastal sand, Vie et Milieu **4** 1954 : p. 270, figs., **Chappuis**, P. A. (11) ; *L. macronyx*, fig., **Delamare-Deboutteville**, C. (2).

*Leptomesochra elongata*, **sp. nov.** sand at Roscoff, Arch. Zool. exp. gén. Notes et Rev. **92** 1955 : p. 8, figs., **Božić**, B. (1).

*Leptopsyllus arenicola*, **sp. nov.** Mediterranean coast sand, Vie et Milieu **4** 1954 : p. 262, figs., **Chappuis**, P. A. (11).

*Lourinia armata*, fig., **Noodt**, W. (4).

*Maraenobiotus fontinalis*, **sp. nov.** Peru, Trans. Linn. Soc. Lond. (3) **1** 1955 : p. 239, figs., **Harding**, J. P. (1).

*Moraria brevipes*, N.W. Spain, figs., **Margalef**, R.

*Nitocra hibernica incerta*, figs., **Kiefer**, F. (3).

*Nitocrella africana*, **sp. nov.** Interstices of sand, L. Tanganyika, Rev. Zool. Bot. Afr. **51** 1955 : p. 77, figs., **Chappuis**, P. A. (10) ; *N. psammophila*, **sp. nov.** Italy sand, Mem. Mus. civ. Stor. nat. Verona **4** 1954 : p. 160, figs., **Chappuis**, P. A. (4) ; *N. gracilis*, **sp. nov.** Pyrenees, subterranean, Notes Biospeolog. **10** 1955 : p. 89, figs., **Chappuis**, P. A. (5).

*Normanella mucronata, reducta, subsp. nov.* Sea of Marmara, Rev. Fac. Sci. Univ. Istanbul **20B** 1955 : p. 92, figs., **Noodt**, W. (2).

*Oniscopsis*, p. 9, **gen. nov.** (Harpacticoida) for *O. pauliani*, **sp. nov.**, figs., Madagascar, Mem. Inst. Sci. Madagascar **9A** 1955 : **Chappuis**, P. A. (3).

*Orthopsyllus psammophilus*, **sp. nov.** Tenerife marine sands, **Noodt**, W. (4) ; *O. linearis* f. *bulbosus* f. **nov.** Sea of Marmara, Rev. Fac. Sci. Univ. Istanbul **20B** 1955 : p. 83, figs., **Noodt**, W. (2).

*Paradactylopodia brevicornis*, figs., **Noodt**, W. (4).

*Paradiosaccus varicolor*, figs., **Noodt**, W. (2).

*Paralaophonte brevirostris*, figs., **Noodt**, W. (2).

*Paraleptastacus spinicauda*, fig., **Delamare-Deboutteville**, C. (2).

*Paramesochra constricta*, figs., **Chappuis**, P. A. (11).

*Paraphyllopodopsyllus longipalpatus*, **sp. nov.** Mediterranean coastal sand, Vie et Milieu **4** 1954 : p. 263, figs., **Chappuis**, P. A. (11) ; *P. hibernicus*, *P. hardingi*, **spp. nov.** Dublin coast, Proc. roy. Irish Acad. **57B** 9 1955 : p. 132, figs., **Roe**, K. M.

*Paraphyllopodopsyllus longipalpatus*, fig., **Chappuis**, P. A. (3).

*Parastenhelia spinosa*, figs., **Božić**, B. (1).

*Parastenocaris trisaetosa*, p. 66, *P. arenicola*, p. 68, *P. pusillus*, p. 69, *P. gracilis*, p. 71, **spp. nov.**, all figd., Key to spp. Madagascar, Mem. Inst. Sci. Madagascar **9A** 1955 : **Chappuis**, P. A. (3) ; *P. ruffoi*, **sp. nov.** Italy sands, Mem. Mus. civ. Stor. nat. Verona **4** 1955 : p. 159, figs., **Chappuis**, P. A. (4) ; *P. diana*, **sp. nov.** Pyrenees subterranean, Notes Biospeolog. **10** 1955 : p. 91, figs., **Chappuis**, P. A. (5) ; *P. nipponensis*, **sp. nov.** subterranean, Japan, Notes Biospeolog. **10** 1955 : p. 187, figs., **Chappuis**, P. A. (9) ; *P. marlieri*, p. 72, figs., *P. cornuta*, p. 74, figs., *P. crassicaudis*, p. 76, figs., **spp. nov.** Interstices of sand, L. Tanganyika, Rev. Zool. Bot. afr. **51** 1955 : **Chappuis**,

*P. A.* (10); *P. kabyla*, **sp. nov.** Mediterranean coastal sand, Vie et Milieu 4 1954 : p. 272, figs., **Chappuis**, *P. A.* (11); *P. bidens*, **sp. nov.** sand interstices by R. Parciba, Brazil, Arch. Hydrob. 50 1955 : p. 77, figs., **Noodt**, W.; *P. phyllophora*, figs., *P. acherusia*, **sp. nov.**, p. 82, figs., N. Italy, Zool. Anz. 154 1955 : **Noodt**, W. (3); *P. karamani*, figd., **Karaman**, S. L. (1); *Parastenocaris*, subterranean, notes, etc., **Noodt**, W. (5).

*Paulianicaris delamarei*, **sp. nov.** Mediterranean coastal sand, Vie et Milieu 4 1954 : p. 272, figs., **Chappuis**, *P. A.* (11).

*Phyllocamptus minutus*, figs., **Noodt**, W. (2).

*Phyllopodopsyllus briani*, p. 126, figs., *P. thiebaudi*, p. 130, figs., **spp. nov.**, Adriatic coastal waters, Fragm. balcanica 1 1955 : **Petkovski**, T. K.

*Psammastacus confluens*, figs., **Chappuis**, *P. A.* (11).

*Psammopsyllus limnicola*, p. 56, **sp. nov.** Madagascar, figs., Key to spp., etc., Mem. Inst. Sci. Madagascar 9A 1955 : **Chappuis**, *P. A.* (3); *P. operculatus*, figs., **Noodt**, W. (2).

*Pseudamphiascopsis attenuatus*, *orientalis*, **subsp. nov.** Sea of Marmara, Rev. Fac. Sci. Univ. Istanbul 20B 1955 : p. 68, figs., **Noodt**, W. (2).

*Pseudobradia beduina*, figs., **Noodt**, W. (2).

*Psyllocamptus minutus*, figs., **Noodt**, W. (2).

*Remania arenicola*, figs., **Božić**, B. (1).

*Rhizothrix gracilis*, figs., **Božić**, B. (1).

*Robertgurneya intermedia*, **sp. nov.** sand at Roscoff, Arch. Zool. exp. gen. Notes et Rev. 92 1955 : p. 5, figs., **Božić**, B. (1); *R. similis*, *amphiascopsis* **subsp. nov.**, p. 69, figs., *R. oligochaeta* **sp. nov.**, p. 72, figs., Sea of Marmara, Rev. Fac. Sci. Univ. Istanbul 20B 1955 : **Noodt**, W. (2).

*Schizopera crassispinata*, p. 46, **sp. nov.** Madagascar, figd., Mém. Inst. Sci. Madagascar 9A 1955 : **Chappuis**, *P. A.* (3); *S. consimilis longifurcata*, **subsp. nov.** Interstices of sand. L. Tanganyika, Rev. Zool. Bot. afr. 51 1955 : p. 79, figs., **Chappuis**,

*P. A.* (10); *S. inornata*, **sp. nov.** Coastal sand, Sweden, K. fysiogr. Sällsk. Lund. Förh. 24 1955 : p. 176, figs., **Noodt**, W. (1).

*Scutellidium ligusticum*, figs., **Noodt**, W. (4).

*Tigriopus* spp., Hybridation experiments, **Božić**, B. (2).

## CYCLOPOIDA

*Acanthocyclops morimoto*, figs., descript., subterr. Japan, **Ito**, T.; *A. nanus*, N.W. Spain, figs., **Margalef**, R.

*Apocyclops borneoensis*, **sp. nov.** Borneo, p. 168, figs., Key to genus, K. fysiogr. Sällsk. Lund. Förh. 24 1955 : **Lindberg**, K. (4).

*Bomolochus pectinatus*, **sp. nov.**, parasitic on *Leuresthes tenuis*, California, Beaufortia 5 1955 : p. 55, figs., **Stock**, J. H. (1).

*Bryocyclops mandakranus*, p. 227, *B. ankaratranus*, p. 228, **spp. nov.** Madagascar, Zool. Anz. 154 1955 : figs., **Kiefer**, F. (6); *B. fidjiensis*, **sp. nov.** Fiji, K. fysiogr. Sällsk. Lund. Förh. 24 1955 : p. 163, figs., **Lindberg**, K. (4).

*Cancerilla durbanensis*, *C. neozelanica*, figs., **Barnard**, K. H. (3).

Clausidae, revision of family, **Wilson**, M. S. & **Illg**, P. L.

*Cochlacocyclops ateles*, **gen. et sp. nov.** Madagascar, Zool. Anz. 154 1955 : p. 231, figs., **Kiefer**, F. (6).

*Cyclops strenuus strenuus*, resting stage, figs., **Elgmork**, K.; *C. leuckarti*, *C. hyalinus*, Copepodid stages, figs., **Andreae**, J. C.; *C. strenuus prealpinus*, *C. landei*, *C. bohater*, figs., *C. abyssorum bodanus*, **subsp. nov.**, p. 90, figs., *C. vicinus lobatus*, **subsp. nov.**, p. 91, figs., Bodensee, Germany, Beitr. naturk. Forsch. S.W. Deutsch. 13 1954 : **Kiefer** F. (1); *C. strenuus*, subsp. incerta, *C. furcifer* cf. *ankyrae*, figs., Turkey, **Kiefer**, F. (3); *C. strenuus praealpinus*, *C. landei*, *C. bohater*, *C. vicinus lobosus*, *C. abyssorum bodanus*, figs., **Kiefer**, F.; *C. vicinus*?, figs., subterranean Japan, **Ito**, T.; *C. (Diacyclops) languidoides* var. *clandestinus*, figs., **Šterba**, O.; *Cyclops* spp. as intermediate host of *Schistocephalus*, figs., **Clarke**, A. S.; *C. viridis*, sex ratio, **Metzler**, S.; *Cyclops* sp.,

hatching of nauplii, photos., **Grave**, E. V.

*Diacyclops disjunctus*, *D. languoides*, *D. languoides japonicus*, *D. languoides suoensis*, p. 399, **sub. sp. nov.** *D. sp.* subterranean Japan, figs., **descript.**, Rep. Fac. Fish. Univ. Mie. **1** 1954 : **Ito**, T.

*Ectocyclops phaleratus* s. str. *E. p. polyspinosus*, *E. p. rubescens*, *E. p. medius*, *E. p. iliarensis*, *E. compactus*, figs., Key to spp., **Fryer**, G. (1).

*Entobius euelpis*, fig., **Barnard**, K. H. (3).

*Ergasilus briani*, in Czechoslovakia, figs., **Romanovsky**, A. (1).

*Eucyclops festivus*, **sp. nov.** Mexico, p. 468, figs., Geographical distribution and Key to spp. of genus, Ark. zool. **7** 1955 : **Lindberg**, K. (1) ; *E. serrulatus baicalocorrepus*, **subsp. nov.** Baikal, p. 106, **Mazepova**, G. F. ; *E. agilis*, *E. macruroides* s. str. *E. m. denticulatus*, seasonal variation in length of furcal rami, **Smyly**, W. J. P. ; *E. neumanni*, figs., **Harding**, J. P. (1) ; *E. serrulatus*. *E. miurai*, subterranean, Japan, figs., **Ito**, T.

*Goniocyclops primus*, **gen. et sp. nov.**, p. 225, figs., *G. alter*, **sp. nov.**, p. 227, figs., Madagascar, Zool. Anz. **154** 1955 : **Kiefer**, F. (6).

*Halicyclops troglodytes*, **sp. nov.** France cavernicolous. Notes biospeol. **9** 1954 : p. 158, figs., **Kiefer**, F. (5)

*Haplocyclops pauliana*, p. 222, *H. neuter*, p. 223, **spp. nov.** Madagascar, figs., Zool. Anz. **154** 1955 : **Kiefer**, F. (6).

*Lichomolgus* spp., ecological notes, **Gotto**, R. V.

*Macrocyclops fuscus*, *M. albidus*, subterranean Japan, figs., **descript.**, **Ito**, T.

*Megacyclops venustus*, N.W. Spain, figs., **Margalef**, R. ; *M. viridis*, *M. viridis takebuensis*, p. 389, **sub. sp. nov.** subterranean Japan, figs., **descript.**, Rep. Fac. Fish. Univ. Mie **1** 1954 : **Ito**, T. ; *M. brachypus*, **sp. nov.** French caves. Notes biospeol. **9** 1954 : p. 160, figs., **Kiefer**, F. (5) ; *M. viridis*, *M. cf. latipes*, figs., Turkey, **Kiefer**, P. (3).

*Mesocyclops bodanicola*, *M. leuckarti*, figs., **Kiefer**, F. ; *M. leuckarti*, figs. **descrip.**, subterr. Japan, **Ito**, T. ; *M. leuckarti aequatorialis*, *M. bodanicola*, figs., Turkey, **Kiefer**, P. (3) ; *M. longisetus*, *M. meridionalis*, figs., **Harding**, J. P. (1) ; *M. longisetus*, figs., **Oliveira**, L. de.

*Microcyclops (Microcyclops) varicans*, **descrip.**, figs., subterr. Japan, **Ito**, T. ; *M. alius*, *M. diversus*, figs., **Harding**, J. P. (1).

*Mytilicola porrecta*, **sp. nov.** pelecypods of Louisiana coast, J. Parasit. **40** 1954 : p. 187, figs., **Humes**, A. G. (1) ; *M. intestinalis*, biology, **Hepper**, B. T.

*Oithona*, Key to spp. *O. alvarezi*, **sp. nov.**, p. 462, figs., Pacific coast of Mexico, Ark. zool. **7** 1955 : **Lindberg**, K. (1).

*Paracyclops fimbriatus*, figs., **Sladeczek**, V. & **Řeháčková**, V. ; Subterranean, Japan, figs., **Ito**, T. ; *P. finitimus*, fig., **Harding**, J. P. (1).

*Psammodiscus excellens*, **gen. et sp. nov.** Madagascar, Zool. Anz. **154** 1955 : p. 229, figs., **Kiefer**, F. (6).

*Sabelliphilus bispirae*, figs., **Barnard**, K. H. (3).

*Speocyclops infernus*, figs., **Kiefer**, F. (4) ; *S. yezoensis*, p. 406, **sp. nov.** subterranean, Japan, figs., **descrip.**, Rep. Fac. Fish. Univ. Mie. **1** 1954 : **Ito**, T. ; *S. racovitzai gouillounensis*, *S. r. subartensis*, **subsp. nov.** French caves, Notes biospeol. **9** 1954 : p. 161, figs., *S. r. boscensis*, **sp. nov.**, p. 164, **Kiefer**, F. (5).

*Thermocyclops dybowskii*, first Spanish fresh-water record, **Margalef**, R. (1) ; *T. venoi*, figs., **descrip.**, subterr., Japan, **Ito**, T. ; *T. operculifer*, figs., **Lindberg**, K. (4).

*Tropocyclops meridionalis*, fig., **Harding**, J. P. (1) ; *T. prasinus*, figs., subterranean, Japan, **Ito**, T. ; *T.*, Key to spp., *T. prasinus aztequei*, **subsp. nov.**, p. 476, figs., Mexico, *T. prasinus mexicanus*, *T. extensus f. longispina*, figs., Ark. Zool. **7** 1955 : **Lindberg**, K. (1).



## CALIGOIDA

*Achtheinus dentatus*, figs., **Barnard**, K. H. (3).

*Aleblon carchariae*, figs., **Barnard**, K. H. (3); **Heegaard**, P.; *A. echinatus*, male and female, descr., figs., **Shiino**, S. M. (8).

*Alicaligus tripartitus*, **gen. et sp. nov.** parasitic on gills of *Sarda orientalis* from Japan, Pacific Sci. 9 1955 : p. 56, figs., **Shiino**, S. M. (7).

*Anthosoma crassum*, figs., **Barnard**, K. H. (3); **Shiino**, S. M. (15).

*Anuretes serratus*, p. 260, fig., *A. quadrilaterus*, p. 264, figs., **spp. nov.** on Japanese fishes, Rep. Fac. Fish. Univ. Mie 1 1954 : **Shiino**, S. M. (11).

*Caligus*, extended Key S. African species, **Barnard** (4); *C. coryphaenae*, *C. cossackii*, *C. lalandei*, *C. tetrodontis*, *C. arii*, *C. engraulidis*, figs., **Barnard**, K. H. (3); *C. hamatus*, **sp. nov.** Bonny River, W. Africa, Atlantide Rept. No. 3, p. 41, figs., **Heegaard**, P.; *C. calotomi*, **sp. nov.** parasitic on *Calotomus japonicus* from Japan, Bull. Jap. Soc. sci. Fish. 20 1954 : p. 16, figs., **Shiino**, S. M.; *C. quadratus*, **sp. nov.** parasitic on *Neothynnus macropterus* from Japan, Bull. Jap. Soc. sci. Fish. 20 1954 : p. 26, figs., **Shiino**, S. M. (1); *C. lacustris*, figs., **Ruting**, J. & **Stock**, J. H.; *C. latigenitalis*, **sp. nov.**, parasitic on *Sparus macrocephalus*, Japan, Bull. Jap. Soc. sci. Fish. 20 1954 : p. 21, figs., **Shiino**, S. M. (2); *C. brevis*, **sp. nov.**, parasitic on Japanese fishes, Bull. Jap. Soc. sci. Fish. 20 1954 : p. 178, figs., **Shiino**, S. M. (4); *C. diezeidei*, descr., figs., **Shiino**, S. M. (5); *C. cordiventris*, male, figs., **Shiino**, S. M. (6); *C. uranoscopi*, **sp. nov.** Mediterranean, p. 281, figs., **Vaissière**, R. (1).

*Cardiodectes medusaens*, figs., **Barnard**, K. H. (3).

*Cecrops latreillei*, figs., **Barnard**, K. H. (3).

*Demoleus latus*, **sp. nov.**, parasitic on *Acanthidium eglantina* from Japan, Rep. Fac. Fish. Univ. Mie 1 1954 : p. 325, figs., **Shiino**, S. M. (13).

*Dinematura latifolia*, figs., **Shiino**, S. M. (13).

*Dinemoura producta*, *D. latifolia*, figs., **Barnard**, K. H. (3).

*Diphylogaster aliuncus*, **sp. nov.**, parasitic on the silver pomfret, *Pampus argenteus*, Bombay, J. Univ. Bombay N.S. 23B 1955 : p. 48, figs., **Rangnekar**, M. P.

*Echthrogaleus coleoptratus*, fig., **Barnard**, K. H. (3); *E. coleoptratus*, *E. denticulatus*, figs., **Shiino**, S. M. (13).

*Elytrophora brachyptera*, figs., **Heegaard**, P.; **Shiino**, S. M. (12).

*Euryphorus nympha*, figs., **Shiino**, S. M. (12).

*Gloiopotes longicaudatus*, figs., **Shiino**, S. M. (12).

*Haemobaphes*, Key to spp. development, *H. ambiguus*, *H. cyclopterina*, *H. dicerans*, *H. enodis*, *H. theragrae*, *H. dilectus*, *H. parvus*, figs., **Delamare-Deboutteville**, C. & **Nunes-Ruivo**, L. P. (1).

*Hatscheckia acuta*, figs., **Barnard**, K. H. (3).

*Lepeophtheirus insignis*, *L. lichiae*, *L. brachyurus*, *L. plotosi*, figs., **Barnard**, K. H. (3); *L. watanabei*, **sp. nov.** on *Myxocephalus raninus* from Japan, Bull. Jap. Soc. sci. Fish. 20 1954 : p. 96, figs., **Shiino**, S. M. (3).

*Lernaea barbicola*, figs., **Barnard**, K. H. (3).

*Lernaenicus longiventris*, figs., **Carvalho**, J. de P.

*Lernaeocera*, nomenclature, **Ilg**, P. L.; *L. branchialis* on *Merluccius*, fig., **Szidat**, L.

*Lernanthropus cadenati*, p. 145, figs., *L. villiersi*, p. 147, figs., *L. eddiwarneri*, p. 151, figs., *L. grassei*, p. 152, figs., *L. monodi*, p. 155, figs., **spp. nov.** on West African fishes, *L. trachuri*, *L. wilsoni* also figd., Bull. Inst. Fr. Afr. Noire 16A 1954 : **Delamare-Deboutteville**, C. & **Nunes-Ruiva**, L. P.; *L. petersi*, figs., **Barnard**, K. H. (3), *L. atrox*, figs., *L. chrysophrys*, figs., *L. shizhidoi*, **nom. nov.** for *L. mugilii*, Shishido note, *L. mugilis* Brian, p. 64, figs., **Shiino**, S. M. (15).

*Nemesia pallida*, figs., **Barnard**, K. H. (3).

*Nesippus alatus*, fig., **Barnard**, K. H. (3); *N. curticaudis*, figs., **Heegaard**, P.

*Orthogoriscicola muricatus*, figs., **Barnard**, K. H. (3); **Shiino**, S. M. (14).

*Pandarus bicolor*, *P. armatus*, figs., **Barnard**, K. H. (3); *P. satyrus*, figs., **Shiino**, S. M. (13).

*Paranesippus incisus*, **gen. et sp. nov.** Pandaridae, Japan seas, parasitic on *Acanthidium eglantina*, p. 349, figs., **Shiino**, S. M. (9).

*Pennella filosa*, *P. crassicornis*, *P. balaenopterae*, *P. varians*, figs., **Barnard**, K. H. (3); *Pennella*, sp., male, figs. **Heldt**, J. H. (3).

*Perissopus dentatus*, fig., **Barnard**, K. H. (3).

*Philorthogoriscus serratus*, figs., **Barnard**, K. H. (3); **Shiino**, S. M. (14).

*Pseudocaligus laminatus*, **sp. nov.**, parasitic on puffer fish, Bombay, J. Univ. Bombay N.S. **23B** 1955 : p. 44, figs., **Rangnekar**, M. P.

*Pseudocynus thymus*, **sp. nov.**, p. 190, figs., North Sea on tunny, *P. appendiculatus*, *P. spinosus*, figs., Key to spp., Veröff. Inst. Meeresf. Bremerhaven **3** 1955 : **Brandes**, C.-H.

*Sagum posteli*, **sp. nov.** on gills of *Epinephelus aeneus* from W. Africa, Bull. Inst. Fr. Afr. Noire **16A** 1954 : p. 158, figs., **Delamare-Deboutteville**, C. & **Nunes-Ruivo**, L. P.

*Sphyron kingi*, photos., **Carrara**, I. S.; photo., **Szidat**, L.

*Trebius caudatus*, figs., **Barnard**, K. H. (3); *T. longicaudatus*, p. 247, figs., *T. akajetii*, p. 252, figs., **spp. nov.** on Japanese fishes, Rep. Fac. Fish Univ. Mie **1** 1954 : **Shiino**, S. M. (10).

*Trifur tortuosus* on *Merluccius hubbsi*, photo., **Szidat**, L.

*Tuxophorus caligodes*, fig., **Heegaard**, P.

## LERNAEOPODOIDA

*Acanthochondria lepidionis*, **sp. nov.** on gills of *Lepidion capense*, Cape Point, Ann. S. Afr. Mus. **41** 1955 : p. 289, figs., **Barnard**, K. H. (3); *A. incisa*, p. 83, figs., *A. longifrons*, p. 86, *A. fissicauda*, p. 90, *A. glandiceps*, p. 93, *A. constricta*, p. 96, *A. spirigera*, p. 100, *A. bicornis*, p. 103, *A. dilatata*, p. 107, **spp. nov.**, all figd., Japan seas, **Shiino**, S. M. (16).

*Achtheres micropteri*, figs., **Barnard**, K. H. (3).

*Blias prionoti*, descr., figs., **Causey** D.

*Brachiella supplicans*, p. 102, **sp. nov.** S. Africa, figs., Ann. S. Afr. Mus. **43** 1955 : **Barnard** (4); *B. lageniformis*, **sp. nov.**, p. 36, branchial chamber of *Merluccius hubbsi*, S. Atlantic ? photo., figs., also *B. merluccii*, Comun. Inst. nac. B. Rivadavia, Zool. **3** 1955 : **Szidat**, L.; *Brachiella* sp., fig., **Barnard**, K. H. (3).

*Charopinus dubius*, fig., **Barnard**, K. H. (3).

*Chondracanthus congiopodi*, **sp. nov.**, p. 288, figs., gills of Horsefish (*Congiopodus torus*), Table Bay, *C. merluccii*, *C. lophii*, figs., **Barnard**, K. H. (3); *C. neali*, *C. colligens*, p. 101, **sp. nov.** S. Africa, figs., Ann. S. Afr. Mus. **43** 1955 : **Barnard** (4); *C. distortus*, *C. theragrae*, *C. polymixiae*, figs., *C. gibbosus*, **sp. nov.**, p. 79, figs., Japan, on *Zenion*, **Shiino**, S. M. (16); *C. palpifer*, *C. merluccii* on *Merluccius hubbsi*, photo., **Szidat**, L.

*Clavella pagelli*, figs., **Barnard**, K. H. (3).

*Clavellopsis fallax*, *C. hostilis*, figs., **Barnard**, K. H. (3).

Echiurophilidae, **fam. nov.**, p. 1579, **Delamare-Deboutteville**, C. & **Nunes-Ruivo**, L. P. (3).

*Echiurophilus fizeii*, **gen. et sp. nov.**, parasitic in digestive tube of *Thalassema*, Vietnam, new family of Chondracanthids, C.R. Acad. Sci. Paris **240** p. 1579, figs., **Delamare-Deboutteville**, C. & **Nunes-Ruivo**, L. P. (3); *E. fizeii*, **gen. et sp. nov.**, parasitic on Echiuroid from Indo China, Vie et Milieu **6** 1955 : 101, figs., **Delamare-Deboutteville**, C. & **Nunes-Ruivo**, L. P. (2).

*Eubrachiella sublobulata*, **sp. nov.** on gills of Horse-fish (*Congiopodus torus*), Table Bay, Ann. S. Afr. Mus. **41** 1955 : p. 300, figs., **Barnard**, K. H. (3).

*Lernaeopoda galei*, *L. bidiscalis*, figs., **Barnard**, K. H. (3).

*Lernaeopodina cluthae* on *Raia maculata*, note, **Gotto**, R. V. (1).

*Medesicaste penetrans*, figs., **Barnard**, K. H. (3).

*Oralien triglae*, fig., **Barnard**, K. H. (4).

*Paeon vaissieri*, **sp. nov.**, p. 161, figs., gills of *Sphyrna conardi* from W. Africa, *P. ferox*, *P. exocoeti*, figs., Bull. Inst. Fr. Afr. Noire **16A** 1954 : **Delamare-Deboutteville**, C. & **Nunes-Ruivo**, L. P.

*Parabrachiella australis*, figs., **Barnard**, K. H. (3).

*Sphyrion laevigatum*, *S. lumpi*, figs., **Barnard**, K. H. (3).

*Strabax monstrosus*, figs., **Barnard**, K. H. (3).

### NOTODELPHYOIDA

*Botryllophilus aspinosus*, fig., **Barnard**, K. H. (3).

*Doropygus pulex*, fig., **Barnard**, K. H. (3).

*Enterocola bilamellatus*, figs., **Barnard**, K. H. (3).

*Gunenotophorus globularis*, var. *giganteus*, figs., **Barnard**, K. H. (3).

*Notodelphys allmani*, figs., **Barnard**, K. H. (3).

*Pararchinotodelphys gurneyi*, **sp. nov.**, from branchial cavities of *Styela partita*, Martha's Vineyard, J. Wash. Acad. Sci. **45** 1955 : p. 216, figs., **Illg**, P. L. (1).

*Zanclopus cephalodisci*, fig., **Barnard**, K. H. (3).

### BRANCHIURA

Texas, **Wurtz**, C. B. & **Romback**, S. S. ; Czechoslovakia, **Cellak**, J.

*Argulus multicolor*, figs., **Lemos de Castro**, A. ; *A. belones*, fig., *A. multipocula*, **sp. nov.** Natal littoral waters, p. 231, figs., *A. capensis* on Cape Kurper, Zoeten. dals Vlei, p. 232, figs., Ann. S. Afr. Mus. **41** 1955 : **Barnard**, K. H. (3) ; *A. siamensis*, subsp. *peninsularis*, parasitic on *Ambrassus ranga*, **Malaviya**, R. B.

*Chonopeltis inermis*, figs., **Barnard**, K. H. (3).

*Dolops ranarum*, figs., **Barnard**, K. H. (3).

### BRANCHIURA incertae sedis

†*Halicyne plana*, figs., **Keuper**, **Müller**, A. H.

### MYSTACOCARIDA

*Derocheilocaris remanei*, descr., figs., ecology, **Delamare-Deboutteville**, C., C. (2) ; *D. remanei* f. *biscayensis*, ecology, **Delamare-Deboutteville**, C. (4).

### OSTRACODA

Bibliography and index to taxonomic terms for Ostracoda, **Howe**, H. V.

Catalogue of ostracods, **Ellis**, B. E. & **Messina**, A. R.

Sex chromosomes in ostracods, **Dietz**, R.

Gut haemochromogens, **Phear**, E. A.

Marine Ostracods, **Chapman**, G. ; **Dahl**, E. (4) ; **Lefeuré**, P. & **Lucas**, G. ; **MacGinitie**, G. E. ; **Ruggieri**, G. (1).

Freshwater Ostracods, **Dittmar**, H. ; **Ferguson**, E. ; **Fryer**, G., G. (2) ; **Harding**, J. P., J. P. (4) ; **Kleerekoper**, H. ; **Lellák**, J. ; **Leloup**, E., **Meel**, L. Van & **Jacquemart**, S. ; **Margalef**, R. (1) ; **Ohm**, P. & **Remmart**, H. ; **Petit**, G. & **Schachter**, D. ; **Rome**, R. ; **Smyly**, W. J. P. (2) ; **Wurtz**, C. B. & **Romback**, S. S.

Terrestrial ostracod, **Harding**, J. P. (3).

Fossil ostracods, **Benson**, R. H. ; **Bielecka**, W. ; **Danisch**, E. ; **Donze**, P. & **Grékoff**, N. ; **Drooger**, C. W., **Kaaschieter**, J. P. A. & **Key**, A. J. ; **Gibson**, L. B. ; **Grékoff**, N. ; **Hessland**, I. ; **Hill**, B. L. ; **Hornibrook**, N. de B. ; **Kesling**, R. V. (1), (3-6) ; **Kesling**, R. V. & **Copeland**, M. J. ; **Kilfoyle**, C. F. ; **Krömmelbein**, K. ; **Lüttig**, G. ; **Moyes**, J. & **Vigneaux**, M. ; **Pokorný**, V. ; **Přibyl**, A. ; **Puri**, H. Z. ; **Ruggieri**, G. ; **Schmidt**, G. ; **Sohn** ; **Stchépinsky**, A. ; **Tomic-Džodžo**, R. ; **Triebel**, E., E. (1) ; **Zalanyi**, B.



## MYODOCOPA

*Checontonomus cophus*, **gen. et sp. nov.** (Oncotechmonidae) Devonian, New York, J. Paleont. **28** 1954 : p. 578, figs., **Kesling**, R. V. (3).

Myodocopida, **ord. nov.**, p. 222, **Pokorný**, V., V. (1).

Oncotechmoninae, **subfam. nov.** Devonian, New York, p. 575, **Kesling**, R. V. (3).

*Oncotechmonus*, **gen. nov.**, p. 577, Type species : *O. chemotus*, **sp. nov.**, p. 577, figs., Devonian, New York, J. Paleont. **28** 1955 : **Kesling**, R. V. (3), *O. chemotus*, figs., **Kesling**, R. V. (4).

## PLATYCOPA

†*Cytherella confusa*, *C. affin. fisheri*, *C. vario-punctata*, figs., Aquitanian & Burdigalian Deposits, **Drooger**, C. W., **Kaaschieter**, J. P. A. & **Key**, A. J.

†*Cytherelloidea* sp., figs., **Drooger**, C. W., **Kaaschieter**, J. P. A., **Key**, A. J. & **Schmidt**, G.

## PODOCOPA

Podocopida, **ord. nov.**, **Pokorný**, V., V. (1).

## CYPRIDACEA

†*Bairdia epicypha*, **nom. nov.** for *B. gibbera* **Kesling** & **Kilgore** not **Morey**, **Kesling**, R. V. & **Kilgore**, J. E. ; †*B. meriuria*, **sp. nov.** Mississippian Missouri, Jour. Paleont. **29** 1955 : p. 1033, figs.; **Benson**, R. H. ; *B. brevis*, *B. elongata*, *B. subdeltoidea*, Aquitanian Deposits, **Drooger**, C. W., **Kaaschieter**, J. P. A. & **Key**, A. J. ; *B. chipolensis*, **sp. nov.**, p. 223, figs., Miocene, Florida, *B. laevicula*, fig., Geol. Bull. Fla. geol. Surv. **36** 1953 : **Puri**, H. S. ; *B. hyphoconcha*, p. 14, *B. notoconstricta*, p. 15, *B. subtila*, *B. extenda*, p. 16, *B. rockfordensis*, p. 17, *B. lanceolata*, p. 18, **spp. nov.** Devonian, Iowa, Bull. Amer. Paleont. **35** 1955 : **Gibson**, L. B.

†*Bairdiocypris biesenbachi*, figs., **Příbyl**, A.

†*Bairdoppilata triangulata*, figs., *B. willisensis*, **sp. nov.** Miocene, Fla., p. 225, figs., Geol. Bull. Fla. Geol. Surv. **36** 1953 : **Puri**, H. S. ; *B. triangulata*,

Aquitanian Deposits, figs., **Drooger**, C. W., **Kaaschieter**, J. P. A. & **Key**, A. J.

†*Beecherella trapezoides*, **sp. nov.** Devonian, Iowa, Bull. Amer. Paleont. **35** 1955 : p. 21, figs., **Gibson**, L. B.

†*Bekena*, **gen. nov.**, p. 18 (*Bairdiidae*), *B. diaphrovalirs*, **sp. nov.**, the type species, p. 19, figs., Devonian, Iowa, Bull. Amer. Paleont. **35** 1955 : **Gibson**, L. B.

†*Bythocypris howei*, *B. minuta*, **spp. nov.** Miocene, Florida, Geol. Bull. Fla. Geol. Surv. **36** 1953 : p. 226, figs., **Puri**, H. S. ; *B. arcuata*, figd., Aquitanian Deposits, **Drooger**, C. W., **Kaaschieter**, J. P. A. & **Key**, A. J.

*Candona cf. brevili*, *C. pratensis*, figd., N.W. Spain, **Margalef**, R.

†*Candona* sp., Recent, New Zealand, figs., **Hornibrook**, N. de B. ; †*C. albicans*, *C. balatonica*, *C. candida*, *C. compressa*, *C. fabaeformis*, *C. marchica*, *C. neglecta*, *C. pratensis*, *C. rostrata*, *C. vavrai*, *C. weltneri*, figs., **Lüttig**, G.

†*Coryellites* (?), nov. spec., figs., **Příbyl**, A.

†*Cyclocypris ovum*, fig., **Lüttig**, G.

*Cypricercus tressleri*, **sp. nov.** S. Carolina, Trans. Amer. micr. Soc. **73** 1954 : p. 190, figs., **Ferguson**, E.

*Cypridopsis viduella*, figs., **Harding**, J. P. (4).

†*Cyprinotus salinus*, figs., *C. salinus barneri*, **subsp. nov.** Interglacial, Germany, p. 157, figs., Paläont. Z. **29** 1955 : **Lüttig**, G.

†*Cypris ciliata*, *Cypris* sp., figs., **Hornibrook**, N. de B. ; *Cypris marginata*, fig., **Lüttig**, G.

†*Darwinula* sp., Recent, New Zealand, figs., **Hornibrook**, N. de B. ; †*D. stevensoni*, fig., **Lüttig**, G.

*Dolerocypris fasciata*, figs., **Margalef**, R.

†*Erpetocypris reptans*, fig., *E. r. aulicae*, **subsp. nov.**, p. 159, figs., Interglacial, Germany, Paläont. Z. **29** 1955 : **Lüttig**, G.

†*Eucypris piger*, fig., **Lüttig**, G.

†*Euglyphella subquadrata*, **sp. nov.** Devonian, Iowa, Bull. Amer. Paleont. **35** 1955 : p. 33, figs., **Gibson**, L. B. ;

*E. (?) polonica*, **sp. nov.** Devonian, Poland, Sborn. geol. Úst. čsl. **20** 1953 : pp. 259, 301, 334, figs., **Příbyl, A.**

†*Herpetocypris reptans*, fig., **Hessland, I.**

*Heterocypris salina*, figs., **Harding, J. P. (4).**

†*Heterocypris incongruens*, fig., **Hessland, I.**

†*Ilyocypris gibba*, *Ilyocypris*, n. sp. unnamed, figs., Interglacial Germany, Paläont. Z. **29** 1955 : **Lüttig, G.** ; *I. gibba, bradyi*, figs., **Hessland, I.** ; *I. magna*, **sp. nov.** Upper Pontic, p. 56, **Sheĭdaeva, H. M.**

*Mesocypris terrestris*, fig., **Harding, J. P. (3).**

†*Morrisites*, **gen. nov.**, p. 21 (Beechereidae), *M. gibbosus*, **sp. nov.**, the type species, p. 22, figs., Devonian, Iowa, Bull. Amer. Paleont. **35** 1955 : **Gibson, L. B.**

†*Octonaria* sp., Devonian, Ohio, figs., **Kesling, R. V. (1).**

†*Paracandona euplectella*, fig., **Lüttig, G.**

†*Paracypris chipolensis*, *P. choctawhatcheensis*, **spp. nov.** Miocene, Florida, Geol. Bull. Fla. Geol. Surv. **36** 1953 : p. 227, figs., **Puri, H. S.** ; *P. sp. A*, *P. sp. B*, figs., **Schmidt, G.** ; *P. acuta*, figs., **Stchépinsky, A.** ; *P. polita*, figs., Aquitanian Deposits, **Drooger, C. W., Kaaschieter, J. P. A. & Key, A. J.**

*Parapontoparta*, **gen. nov.**, p. 109 (Candocyprinae), *P. arcuata*, **sp. nov.**, p. 111, figs., Coast of Brazil, Zool. Anz. **154** 1955 : **Hartmann, G.**

†*Pionocypris vidua*, fig., **Hessland, I.**

†*Plagionephrodes bicostalis*, p. 24, figs., *P. allotriviivalvis*, p. 25, figs., *P. shideleri*, p. 27, figs., *P. werneri*, p. 28, figs., **spp. nov.** Devonian, Iowa, Bull. Amer. Paleont. **35** 1955 : **Gibson, L. B.**

†*Ponderodictya punctulifera*, figs., **Příbyl, A.**

*Pontoparta salina*, **sp. nov.** Siwa Oasis, p. 63, figs., Proc. Egypt Acad. Sci. **10** 1955 : **Harding, J. P. (4).**

†*Potamocypris* sp., Recent, New Zealand, figs., **Hornibrook, N. de B.** ;

†*P. fulva*, fig., **Lüttig, G.** ; *P. thiene-manni* in Britain, figs., **Fryer, G.**

*Stenocypris leleupi*, p. 170, figs., *S. thysvillensis*, p. 172, figs., **spp. nov.** Caves in Belgian Congo, Rev. zool. Bot. Afr. **52** 1955 : **Harding, J. P.**

†*Triebelina boldi*, p. 107, **sp. nov.** Moulin de Gamachot, Aquitanian ? Verh. Akad. Wet. Amst. Afd. Natuurk. (1) **21** 2 1955 : **Drooger, C. W., Kaaschieter, J. P. A. & Key, A. J.**

#### CYTHERACEA

†*Actinocythereis exanthemata*, *A. e.* var. *gomillionensis*, var. *marylandica*, figs., **Puri, H. S.**

†*Allostracites*, **nom. nov.** for *Paracythere* Ulrich & Bessler, 1932, not Muller, 1894, Sborn. geol. Úst. čsl. **20** 1953 ; pp. 267, 309, 109, **Příbyl, A.**

†*Amphicythere semisulcata*, **gen. et sp. nov.** Progonocytherinae, Malm, Germany, Senckenbergiana Lethaea **35** 1954 : p. 13, figs., **Triebel, E.**

†*Anomocytheridea floridana*, figs., **Puri, H. S.**

†*Apatocythere simulans*, figs., **Triebel, E.**

†*Basslerites bosqueti*, p. 130, **sp. nov.** Aquitanian Deposits, figd., Verh. Akad. Wet. Amst. Afd. Natuurk. (1) **21** 2 1955 : **Drooger, C. W., Kaaschieter, J. P. A. & Key, A. J.**

†*Bracnocythere miocenicus*, **sp. nov.** Miocene, Florida, Geol. Bull. Fla. Geol. Surv. **36** 1954 : p. 249, figs., **Puri, H. S.**

†*Bufina europaea*, **sp. nov.** Devonian Poland, Sborn. geol. Úst. čsl. **20** 1953 : pp. 258, 300, 333, figs., **Příbyl, A.**

†*Cativella navis*, figs., **Puri, H. S.**

†*Caudites guinesensis*, figd., Aquitanian Deposits, **Drooger, C. W., Kaaschieter, J. P. A. & Key, A. J.** ; †*C. chipolensis*, *C. sellardsi*, figs., **Puri, H. S.**

†*Clithrocytheridea*, n. sp. S., *C. pulchra*, **sp. nov.**, p. 57, figs., *C. plena*, figs., Kimmeridge, Germany, Abh. Senckenberg. naturf. Ges. No. 491, **Schmidt, G.** ; *C. fortisensis*, p. 114, **sp. nov.** Aquitanian ? Verh. Akad. Wet. Amst. Afd. Natuurk. (1) **21** 2 1955 : **Droo-**

ger, C. W., **Kaaschieter**, J. P. A. & **Key**, A. J.

†*Cnestocythere truncata*, figd., Aquitanian-Burdigalian Deposits, **Drooger**, C. W., **Kaaschieter**, J. P. A. & **Key**, A. J.

*Cyprideis wolburgi wolburgi*, C. w. *minuta*, **subsp. nov.**, p. 58, figs., Kimmeridge, Germany, Abh. Senckenberg. naturf. Ges. No. 491, **Schmidt**, G.; *C. littoralis*, fig., **Hessland**, I.; *Cyprideis*? sp., figd., Aquitanian-Burdigalian Deposits, **Drooger**, C. W., **Kaaschieter**, J. P. A. & **Key**, A. J.

†*Cythere apalachicolensis*, p. 249, C. *redbayensis*, p. 250, **spp. nov.**, both figd., Miocene, Florida, Geol. Bull. Fla. geol. Surv. **36** 1953 : **Puri**, H. S.

†*Cythereis* sp., figs., **Schmidt**, G.; *C. plicatula*, figd., Aquitanian-Helvetian Deposits, **Drooger**, C. W., **Kaaschieter**, J. P. A. & **Key**, A. J.; *C. bonnemai*, fig., *C. villierensis*, p. 498, figs., **sp. nov.** Lower Cretaceous, France, Bull. Soc. géol. Fr. (6) **4** 1954 : **Stchépinsky**, A.

†*Cytheretta costellata*, C. *jurinei*, C. *ramosa sublaevis*, C. *rhenana rhenana*, C. *tenuistriata*, figd., Burdigalian & Aquitanian Deposits, **Drooger**, C. W., **Kaaschieter**, J. P. A. & **Key**, A. J.

†*Cytheromorpha laevigata*, p. 275, figs., C. *subminuta*, p. 276, figs., **spp. nov.**, C. *warneri okaloosensis*, p. 277, figs., **var. nov.** Miocene, Florida, C. *dalli*, C. *warneri*, figs., Geol. Bull. Fla. geol. Surv. **36** 1953 : **Puri**, H. S.

†*Cytheropteron pantaleonensis*, **sp. nov.** Lower Cretaceous, France, Bull. Soc. géol. Fr. (6) **4** 1954 : p. 496, figs., **Stchépinsky**, A.; C. *choctawhatcheensis*, C. *coryelli*, C. *leonensis*, p. 242, C. *talquinensis*, C. *wardensis*, p. 243, **spp. nov.**, all figd., Miocene, Florida, Geol. Bull. Fla. geol. Surv. **36** 1953 : **Puri**, H. S.; C. (C.) *purum*, C. cf. *prolongatum*, figs., **Schmidt**, G.

†*Cytherura alata*, figd., Aquitanian-Burdigalian Deposits, **Drooger**, C. W., **Kaaschieter**, J. P. A. & **Key**, A. J.; *Cytherura wardensis*, figs., **Puri**, H. S.

†*Diogmoipteron*, **gen. nov.**, p. 823, Type species : *Brachycythere lünenensis* Triebel 1941, *T. lünenensis*, figs., Jour. Paleont. **28** 1954 : **Hill**, B. L.

†*Dolococytheridea hilseana*, figs., **Stchépinsky**, A.

†*Echinocythereis*, **gen. nov.**, p. 259, type species : *Cythereis garretti* Howe & McGuirt, *E. garretti*, *E. evax*, Geol. Bull. Fla. geol. Surv. **36** 1953 : **Puri**, H. S.

*Entocythere heterodonta cubensis*, p. 193, **sub. sp. nov.**, *E. ruibali*, p. 194, *E. claytonhoffi*, all figd., Cuba, An. Inst. Biol. Mex. **26** 1 1955 : **Rioja**, E.

†*Eocytheropteron wassyensis*, **sp. nov.** Lower Cretaceous, France, Bull. Soc. géol. Fr. (6) **4** 1954 : p. 496, figs., **Stchépinsky**, A.

†*Eucythere* sp., figd., Burdigalian, **Drooger**, C. W., **Kaaschieter**, J. P. A. & **Key**, A. J.

†*Eucytherura weingeisti*, **sp. nov.** Miocene, Florida, Geol. Bull. Fla. geol. Surv. **36** 1953 : p. 246, figs., **Puri**, H. S.

†*Exophthalmocythere*? *gigantea*, figs., **Schmidt**, G.

†*Graphiadactyllis fernglenensis*, p. 1033, *G. moridgei*, p. 1034, **spp. nov.** Mississippian, Missouri, both figd., *G. granopunctatus*, *G. aff. G. lineatus*, *G. cf. G. cornutus*, figs., J. Paleont. **29**, **Benson**, R. H.

†*Haplocytheridea perforata cambesienis*, p. 110, **sub. sp. nov.**, Stampian, *H. helvetica*, *H. reversa*, *H. strigulosa*, all figd., Aquitanian Deposits, Verh. Akad. Wet. Amst. Afd. Natuurk. (1) **21** 2 1955 : **Drooger**, C. W., **Kaaschieter**, J. P. A. & **Key**, A. J.; *H. triebeli*, figs., **Schmidt**, G.; *H. brevis*, figs., **Stchépinsky**, A.; *H. bassleri*, *H. choctawhatcheensis*, *H. wadei*, *H. okaloosensis*, *H. chipolensis*, *H. gardnerae*, *H. cf. proboscidiata*, *H. waltonensis*, *H. mansfieldi*, figs., **Puri**, H. S.

†*Hemicythere amygdala*, *H. confragosa*, *H. laevicula*, figs., **Puri**, H. S.; *H. deformis*, *H. galeata*, *H. magnei*, p. 123, **sp. nov.** *H. trigonula*, *H. sp.*, all figd., Aquitanian-Burdigalian Deposits, Verh. Akad. Wet. Amst. Afd., Natuurk. (1) **21** 2 1955 : **Drooger**, C. W., **Kaaschieter**, J. P. A. & **Key**, A. J.

†*Hemicytherideis curvata*, *H. lithodomoidea*, figd., Aquitanian-Burdigalian Deposits, **Drooger**, C. W., **Kaaschieter**, J. P. A. & **Key**, A. J.



†*Hemicytherura videns*, figd., Aquitanian Deposits, **Drooger, C. W., Kaaschieter, J. P. A. & Key, A. J.**

†*Hermania reticulata*, **gen. et sp. nov.** (Hemicythernae) Miocene, Florida. Geol. Bull. Fla. geol. Surv. **36** 1953 : p. 267, **Puri, H. S.**

†*Hermanites*, **nom. nov.** for *Hermania* Puri, 1954, not Monterosato, 1844, J. Paleont. **29** 1955 : p. 658, **Puri, H. S.** (1).

†*Kangarina chipolensis*, *K. howei*, p. 246, *K. jacksonbluffensis*, p. 247, **spp. nov.**, both figd., Miocene, Florida, *K. quellita*, fig., Geol. Bull. Fla. geol. Surv. **36** 1953 : **Puri, H. S.**; *K. abyssicola*, figd., Burdigalian Deposits, **Drooger, C. W., Kaaschieter, J. P. A. & Key, A. J.**

†*Krithe papillosa*, figd., Burdigalian Deposits, **Drooger, C. W., Kaaschieter, J. P. A. & Key, A. J.**

†*Leptocythere canaliculata*, figd., Burdigalian, **Drooger, C. W., Kaaschieter, J. P. A. & Key, A. J.**

†*Limnocythere duffi*, **sp. nov.** Recent, New Zealand, Rec. Canterbury [N.Z.] Mus. **6** 4 1955 : p. 269, figs., **Hornibrook, N. de B.**; *L. inflata*, fig., **Schmidt, G.**; *L. inopinata*, *L. sanctipatricii*, figs., **Lüttig, G.**; *L. relictia*, N.W. Spain, figs., **Margalef, R.**

†*Loxoconcha carinata*, *L. grateloupiana*, *L. punctatella*, figd., Aquitanian Deposits, **Drooger, C. W., Kaaschieter, J. P. A. & Key, A. J.**; *L. anderseni*, p. 269, *L. alumblyffensis*, *L. caudata*, *L. chipolensis*, p. 270, *L. doryandae*, *L. hendryi*, p. 271, *L. wilberti*, p. 274, all figd., **spp. nov.** Miocene, Florida, Geol. Bull. Fla. geol. Surv. **36** 1953 : **Puri, H. S.**

†*Loxoconcha affinis*, **sp. nov.**, p. 54, *L. djafarovi*, var. *schemachinica*, **var. nov.**, p. 52, *L. pontocaspis*, **sp. nov.**, p. 54, *L. pseudoplana*, **sp. nov.**, p. 55, Upper Pontic, Azerbaidjan, **Sheidaeva, H. M.**

*Loxoconchella*, **gen. nov.**, p. 17, type species *Loxoconcha honoluluensis* Brady, 1880, description, figs., Senckenbergiana Lethaea **35** 1954 : **Triebel, E.** (1).

†*Macrodentina*, n. sp. aff. *lineata*, *M. retirugata textilis*, *M. r. decorata*, figs.,

*M. ? spinosa*, **sp. nov.** Oolitic, Germany, Abh. Senckenb. naturf. Ges. No. 491 p. 56, figs., **Schmidt, G.**; *M. lineata*, figs., *M. calcarata*, **sp. nov.**, p. 12, figs., Malm, Germany, Senckenbergiana Lethaea **35** 1954 : **Triebel, E.**

†*Metacypris* sp., figs., **Schmidt, G.**; *M. cordata*, fig., **Lüttig, G.**

†*Murrayina*, **gen. nov.**, p. 255, Type species *M. howei*, **nom. nov.** for *Cythere producta* Ulrich & Bassler not Brady, *M. howei*, *M. gunteri*, *M. martini*, figs., Geol. Bull. Fla. geol. Surv. **36** 1953 : **Puri, H. S.**

†*Neocytherideis linearis*, figd., Aquitanian-Burdigalian Deposits, **Drooger, C. W., Kaaschieter, J. P. A. & Key, A. J.**

†*Orionina*, **gen. nov.**, p. 253, type species : *Cythere vaughani* Ulrich & Bassler, *O. vaughani*, figs., *O. lienenklausii*, figs., Geol. Bull. Fla. geol. Surv. **36** 1953 : **Puri, H. S.**

†*Orthonotacythere inversa*, figs., **Stchépinsky, A.**; *O. cf. rimosa*, *O. cf. favulata*, figs., **Schmidt, G.**

†*Paracytheretta schoelleri*, p. 119, **sp. nov.**, figd., Aquitanian Verh. Akad. Amst. Afd. Natuurk. (1) **21** 2 1955 : **Drooger, C. W., Kaaschieter, J. P. A. & Key, A. J.**

†*Paracytheridea* (*Paracytherofteron*) *fenestrata*, figd., Aquitanian-Burdigalian, **Drooger, C. W., Kaaschieter, J. P. A. & Key, A. J.**

†*Paracytheridea* (*Paracytheridea*) *gradata*, *P. (Paracytheridea) tuberosa biensani*, p. 116, **sub. sp. nov.** Stampian, Verh. Akad. Wet. Amst. Afd. Natuurk. (1) **21** 2 1955 : **Drooger, C. A., Kaaschieter, J. P. A. & Key, A. J.**; *P. altilla*, *P. chipolensis*, figs., *P. shoalriverensis*, **sp. nov.**, p. 237, figs., Miocene, Florida, *P. vandenboldi*, fig., *P. washingtonensis*, **sp. nov.**, p. 240, figs., Miocene, Florida, Geol. Bull. Fla. geol. Surv. **36** 1953 : **Puri, H. S.**

†*Platycythereis baillyensis*, **sp. nov.** Lower Cretaceous, France, Bull. Soc. géol. Fr. (6) **4** 1954 : p. 498, figs., **Stchépinsky, A.**

†*Ponderodictya punctulifera*, figs., **Triebel, E.**; *P. triplicata*, *P. auriculata*, *P. rugosa*, figs., **Stchépinsky, A.**

†*Procythereis calhounensis*, figs., **Puri**, H. S.

†*Progonocythere* ? cf. *hieroglyphica*, *P.*? n. sp., figs., **Schmidt**, G.

†*Protocythere* ? n. sp., fig., **Schmidt**, G.

†*Pterygocythere*, **gen. nov.**, p. 819, type species : *Cypridina alata* Bosq. 1847, *P. alata*, figs., *P. gulfensis*, *P. bernardi*, figs., *P. murrayi*, **sp. nov.**, p. 822, figs., Eocene to Oligocene, U.S.A., Journ. Paleont. **28** 1954 : **Hill**, B. L.

†*Pterygocythereis jonesii*, figs., *P. howei*, **sp. nov.** Cretaceous & Tertiary, Maryland, p. 812, figs., *P. americana*, *P. ivani*, *P. franki*, *P. lemnicata*, *P. thomasi*, *P. tokiana*, *P. serrata*, figs., *P. nadeauae*, **sp. nov.**, p. 818, figs., Cretaceous, Texas, Journ. Paleont. **28** 1954 : **Hill**, B. L. ; †*P. cornuta americana*, figs., **Puri**, H. S. ; *P. fimbriata*, figd., Aquitanian ? Deposits, **Drooger**, C. W., **Kaaschieter**, J. P. A. & **Key**, A. J.

†*Puriana puella*, *P. rugipunctata*, figs., **Puri**, H. S.

†*Rectotrachyleberis* cf. *R. triplistriata*, figs., **Puri**, H. S.

†*Schuleridea bilobata*, figs., **Triebel**, E.

*Trachyleberis*, notes on genus, **Sylvester-Bradley**, P. C. & **Harding**, J. P. ; *Trachyleberis edwardsi*, *T. haidingeri*, *T. hebertiana*, *T. macropora*, *T. micheliniana*, *T. scabra*, figd., Aquitanian-Burdigalian deposits, etc., **Drooger**, C. W., **Kaaschieter**, J. P. A. & **Key**, A. J.

*Tyrrhenocythere pignattii*, **gen. et sp. nov.**, near *Hemicythere* Mediterranean, J. Paleont. **29** 1955 : p. 698, figs., **Ruggieri**, G. (1).

†*Urocythereis* sp., figd., Burdigalian Deposits, **Drooger**, C. W., **Kaaschieter**, J. P. A. & **Key**, A. J.

†*Xestoleberis glabrescens*, figd., Burdigalian Deposits, **Drooger**, C. W., **Kaaschieter**, J. P. A. & **Key**, A. J. ; *X. lutrae* var. *plerique*, **var. nov.** mid Pontic, Khinislin ravine, Sheurakhine region, Azerbaid., Sheidaeva, H.M. Bull. Acad. Sci. Azerbaid. **4** 1956 55.

## PALEOCOPA

### BEYRICHIACEA

†*Abditoloculina pulchra*, **sp. nov.** Devonian, New York, Contr. Mus. Paleont. Univ. Michigan **12** 1955 : p. 274, figs., **Kesling**, R. V. (6).

†*Aechminella fimbriata*, **sp. nov.** Devonian, Iowa, Bull. Amer. Paleont. **35** 1955 : p. 12, fig., **Gibson**, L. B.

†*Amphissites carmani* ? figs., **Gibson**, L. B.

†*Amphizona asceta*, **gen. et sp. nov.** Devonian, New York, Contr. Mus. Paleont. Univ. Mich. **11** 1954 : 154, figs., **Kesling**, R. V. & **Copeland**, M. J.

†*Barychilina periplyches*, **sp. nov.** Devonian, Ohio, Contr. Mus. Paleont. Univ. Mich. **11** 1954 : p. 174, figs., **Kesling**, R. V. (1).

Beyrichiida, **order nov.**, **Pokorny**, V., V. (1).

†*Ctenoloculina* cf. *cicatricosa*, figs., **Příbýl**, A.

†*Dizygopleura compta*, **sp. nov.** Devonian, Ohio, Contr. Mus. Paleont. Univ. Mich. **11** 1954 : p. 168, figs., **Kesling**, R. V. (1).

†*Endolophia*, **gen. nov.**, p. 174, for *E. chariessa*, **sp. nov.**, p. 176, figs., Devonian, Ohio, Contr. Mus. Paleont. Univ. Mich. **11** 1954 : **Kesling**, R. V. (1).

†*Glyptopleura mesodevonica*, **sp. nov.** Devonian, Poland, Sborn, geol. Úst. csl. **20** 1953 : pp. 253, 294, 328, figs., **Příbýl**, A.

†*Hollinella variopapillata*, **sp. nov.** Devonian, Ohio, Contr. Mus. Paleont. Univ. Mich. **11** 1954 : p. 179, figs., **Kesling**, R. V. (1).

†*Jonesina biloba*, **sp. nov.** Devonian, Iowa, Bull. Amer. Paleont. **35** 1955 : p. 8, figs., *J.* sp., fig., **Gibson**, L. B.

†*Kirkbya fernglenensis*, p. 1036, *K. keiferi*, p. 1037, **spp. nov.**, both figd., Mississippian, Missouri, J. Paleont., **29**, **Benson**, R. H.

†*Kirkbyella devonica*, **sp. nov.** Devonian, Iowa, Bull. Amer. Paleont. **35** 1955 : **Gibson**, L. B.

†*Kosłowskiella*, **subgen. nov.** cf. *Ulrichia*, pp. 241, 282, 318, Type

species *U. (K.) kozlowskii*, **sp. nov.** pp. 242, 283 & 318, figs., Devonian, Poland, Sborn. geol. Úst. čsl. **20** 1953 : **Příbyl, A.**

†*Monoceratina* ? *levinsoni*, **sp. nov.** Devonian, Iowa, Bull. Amer. Paleont. **35** 1955 : p. 13, figs., **Gibson, L. B.**

†*Öpikium tenerum* figs., **Kesling, R. V. (5).**

†*Phlyctiscapha apleta*, **sp. nov.** Devonian, Michigan, Contr. Mus. Paleont. Univ. Mich. **11** 1954 : p. 188, figs., **Kesling, R. V.**

†*Poloniella kielanae*, **sp. nov.** Devonian, Poland, Sborn. geol. Úst. čsl. **20** 1953 : pp. 251, 292, 325, figs., **Příbyl, A.**

†*Polyzygia gürichiana*, **nom. nov.** for *P. gürichi* Krommelbein 1953 not Polenova 1952, Senckenbergiana, Lethaea **35** 1955 : p. 371, **Krömmelbein, K.** ; *P. symmetrica*, *P. trigonata*, figs., **Příbyl, A.**

†*Quasillites beachi*, p. 29, figs., *Q. hackberryensis*, p. 31, figs., *Q. ellipticus*, p. 31, figs., **spp. nov.** Devonian, Iowa, Bull. Amer. Paleont. **35** 1955 : **Gibson, L. B.**

†*Rakverella bonnemai*, figs., **Kesling, R. V. (5).**

†*Roundyella calceolae*, *R. cf. calceolae*, figs., **Příbyl, A.** ; *R. mopacifica*, **sp. nov.** Mississippian, Missouri, J. Paleont. **29** p. 1037, figs., **Benson, R. H.** ; *R. fimbriamarginata*, **sp. nov.** Devonian, Iowa, Bull. Amer. Paleont. **35** 1955 : p. 11, fig., **Gibson, L. B.**

†*Savagellites*, **nom. nov.** for *Savagella* Geis, 1932, not Foerste, 1920, Sborn. geol. Úst. čsl. **20** 1953 : pp. 267, 308, 341, **Příbyl, A.**

†*Teuposella stellata*, **sp. nov.** Devonian, New York, Contr. Mus. Paleont. Univ. Michigan **12** 1955 : p. 277, figs., **Kesling, R. V. (6).**

†*Trypetera barathrota*, **gen. et sp. nov.** Devonian, Ohio, Contr. Mus. Paleont. Univ. Mich. **11** 1954 : p. 178, figs., **Kesling, R. V. (1).**

†*Youngiella* sp., fig., **Gibson, L. B.**

#### LEPERDITACEA

†*Leperditiida*, **ord. nov.**, p. 222, **Pokorný, V., V. (1).**

†*Macronotella punctulifera*, **sp. nov.** Devonian, Iowa, Bull. Amer. Paleont. **35** 1955 : p. 7, fig., **Gibson, L. B.**

†*Paraparchites* cf. *P. nicklesi*, figs., **Benson, R. H.**

#### BRANCHIOPODA

Spanish Phyllopoda, **Margalef, R. (1).**

Gut haemochromogens, **Phear, E. A.**

#### CLADOCERA

Cladoceran remains in Upper Swamp deposit, Pyramid Valley, **Deevey, E. S., Jr.**

Tolerance of brackish water by *Daphnia* spp., **Lagerspetz, K.**

Respiration of *Simocephalus*, **Hoshi, T.**

Sex determination and fat metabolism in *Moina*, **Dehn, M. v.**

Faunal lists.—Freshwater, **Aguesse, P.** ; **Bardach, J. E.** ; **Brehm, V. (1), (3), (8)** ; **Damas, H.** ; **Davis, C. C.** ; **Dittmar, H.** ; **Facinelli, E.** ; **Fincher, J. A. & McGinty, M. S.** ; **Frey, D. G.** ; **Fryer, G. (2)** ; **Galliford, A. L.** ; **Galliford, A. L. (1)** ; **Harding, J. P. (2)** ; **Hensiek, W.** ; **Herbst, H. V.** ; **Joly, R.** ; **Kleerekoper, H.** ; **Leloup, E.** ; **Meel, L. van & Jacquemart, S.** ; **Lieder, K.** ; **Margalef, R.** ; **Moroni, A. (1)** ; **Olivier, S. R.** ; **Pennak, R. W.** ; **Pennak, R. W. (1)** ; **Petit, G. & Schachter, D.** ; **Ponyi, E.** ; **Sebestyén, O.** ; **Sládeček, V., V. (1-3)** ; **Smyly, W. J. P. (2)** ; **Thomasson, K.** ; **Uéno, M., M. (1-2)** ; **Wurtz, C. B. & Rombach, S. S.**

Adriatic Cladocera, **Cannicci, G.**

*Acroperus harpae*, N.W. Spain, figd., **Margalef, R.**, fig ; **Uéno, M. (1).**

*Alona cambouei*, *A. diaphana*, figs., **Harding, J. P. (2)** ; *A. affinis*, *A. rectangula*, *A. guttata*, *A. costata*, N.W. Spain, figs., **Margalef, R.**

*Alonella excisa* var. *clathratula*, figs., **Harding, J. P. (2)** ; *A. excisa*, N.W. Spain, figs., **Margalef, R.** ; *A. dadayi* = *Leptorhynchus dentifer*, figs., **Brehm, V. (8)** ; *A. sculpta*, figs., **Brehm, V. (8).**



*Alonopsis titi*, **sp. nov.** Peru, Trans. Linn. Soc. Lond. (3) **1** 1955 : p. 346, figs., **Harding**, J. P. (2).

*Bosmina longirostris* variation, figs., **Perner-Manegold**, B. ; *B. hagmanni*, figs., **Brehm**, V. (1) ; *B. longispina*, *B. acrocoregoni*, *B. longirostris*, figs., **Kiefer**, F. ; *B. tubicen*, **sp. nov.** Venezuela, Ergeb. deutsch. limnol. Venezuela Exp. 1952 **1** (1954 ?) : p. 222, figs., **Brehm**, V. (8) ; *B. fatalis*, *B. fatalis-chiangsuensis*, *B. fatalis-philippinensis*, figs., **Uéno**, M.

*Bosminopsis deitersi*, fig., **Uéno**, M.

*Bythotrephes longimanus*, fig., **Kiefer**, F.

*Camptocercus rectirostris*, fig., **Uéno**, M. ; *C. oklahomensis*, figs., **Harding**, J. P. (2).

*Ceriodaphnia reticulata*, N.W. Spain, figd., **Margalef**, R. ; *C. dubia*, figs., **Harding**, J. P. (2).

*Chydorus piger*, *C. barroisi*, N.W. Spain, figs., **Margalef**, R. ; *C. eurynotus*, *C. kallipygos*, figs., **Harding**, J. P. (2) ; *C. sphaericus*, figs., **Uéno**, M.

*Daphnia peruviana*, **sp. nov.** Peru, p. 332, figs., *D. carinata*, *D. pulex*, figs., Trans. Linn. Soc. Lond. (3) **1** 1955 : **Harding**, J. P. (2) ; *D. longispina hyalina*, *D. galeata*, *D. cucullata*, figs., **Kiefer**, F. ; *D. atkinsoni* f. *bolivari* in Tunisia, figs., **Burrollet**, P. F. ; *D. longispina*, 'minnehaha' form, figs., **Smyly**, W. J. P. (1) ; *D. carinata*, *D. pulex*, figs., **Uéno**, M. ; *D. longispina*, figs., **Uéno**, M. (1) ; *D. obtusa*, population dynamics, **Slobodkin**, L. B. ; *D. pulex*, chromosomes, spermatogenesis, figs., **Kojima**, Y. ; heartbeat frequency study, **Schwartzkopff**, J. ; *D. magna*, vertical migration, **Harris**, J. E. & **Wolfe**, U. K. ; *Daphnia* sp., correlation of distribution with water currents, **Ragotskii**, R. A. & **Bryson**, A. ; Population studies, **Edmondson**, W. T. ; **Green**, J. ; *Daphnia* spp., with haemoglobin in fat cells, **Green**, J. (1) ; Effect of oxygen on concentration of haem, **Fox**, H. M. (1) ; Epibionts, **Green**, J. ; *D. magna*, unaffected by Antintrin-Sr, **Kent**, G. G. & **Hodges**, S. ; Feeding inhibited by phytoplankton, **Ryther**, J. H.

*Diaphanosoma brachyurum*, figs., **Harding**, J. P. (2) ; **Kiefer**, F. ; **Uéno**, M. (1).

*Dunhevedia crassa dvihallyana*, **subsp. nov.**, p. 315, figs., Hungary, **Ponyi**, E. ; *D. odontoplax*, figs., **Harding**, J. P. (2) ; *D. crassa*, figs., **Uéno**, M.

*Eurycercus lamellatus*, figd., N.W. Spain, **Margalef**, R.

*Evadne nordmanni*, figs., **Olivier**, S. R. (1) ; *E. tergestrina*, *E. spinifera*, photos., **Cannicci**, G.

*Ilyocryptus sordidus*, var. fig., **Harding**, J. P. (2).

*Latonopsis australis*, figs., **Uéno**, M.

*Leptodora kindtii*, fig., **Kiefer**, F.

*Leptorhynchus dentifer* = *Alonella dadayi*, figs., **Brehm**, V. (8).

*Leydigia ciliata*, figs., **Harding**, J. P. (2).

*Macrothrix palearis*, p. 336, figs., *M. camjatae*, p. 339, figs., **sp. nov.** Peru, *M. triserialis*, *M. laticornis*, *M. montana*, figs., Trans. Linn. Soc. Lond. (3) **1** 1955 : **Harding**, J. P. (2) ; *M. hirsuticornis*, figd., Spain, **Margalef**, R.

*Moina dubia pectinata*, **sub. sp. nov.** Madagascar, p. 38, figs., *Moina salinarum*, *M. rectirostris*, descr., figs., **Gauthier**, H. ; *M. eugeniae*, **sp. nov.** Buenos Aires, Notas Mus. Eva Perón **17** 1954 : p. 81, figs. **Olivier**, S. R. ; *M. rectirostris*, sex determination and fat metabolism, **Dehn**, M. v. ; *M. australiensis*, figs., **Brehm**, V. (1) ; *M. australiensis*, figs., **Harding**, J. P. (2).

*Oxyurella longicaudis*, fig., **Brehm**, V. (8).

*Penilia avirostris*, photo., **Cannicci**, C.

*Pleuroxus caca*, **sp. nov.**, p. 347, figs., Peru, *P. aduncus*, figs., Trans. Linn. Soc. Lond. (3) **1** 1955 : **Harding**, J. P. (2).

*Podon polyphemoides*, figs., **Olivier**, S. R. (1).

*Scapholeberis mucronata*, var. *fronte cornuta*, fig., **Bardach**, J. E. ; *S. mucronata cornuta*, *S. mucronata*, figd., Spain, **Margalef**, R. ; *S. echinulata kertészi*, **subsp. nov.**, p. 312, figs., Hungary, **Ponyi**, E. ; *S. mucronata*, fig., **Uéno**, M. (1).

*Sida crystallina*, egg-laying, photos., **Loidl, R.**

*Simocephalus serrulatus* var. *armata*, var. **nov.**, p. 221, (fig. titled var. *barbata*) Venezuela, *Ergeb. deutsch. limnol. Venezuela Exp.* 1952 **1** (1954?): **Brehm, V. (8)**; *S. vetulus gebhardti*, **subsp. nov.**, p. 313, figs., Hungary, **Ponyi, E.**; *S. vetulus*, behavior to coloured light, **Nagano, T.**

### CONCHOSTRACA

Detailed account of fossil Conchostraca, many figs., **Kobayashi, T.**

†*Asmusiella*, **gen. nov.**, p. 787, *A. sibirica*, **sp. nov.**, p. 787, figs., Carboniferous, the type species and *A. mordovskyi*, **sp. nov.**, p. 787, figs., **Novoshilov, N. I.**

†*Asmussinae*, **subfam. nov.**, p. 132, **Kobayashi, T.**

†*Bileia*, **gen. nov.**, Type sp. *Leaia curta* Reed, *J. Fac. Sci. Univ. Tokyo* **II 9** p. 143, **Kobayashi, T.**

†*Congestheriella*, **gen. nov.**, Type species: *Estheriella lualabensis* Leriche, *J. Fac. Sci. Univ. Tokyo* **II 9** p. 139, **Kobayashi, T.**

†*Ctenaenigma turaense*, **gen. et sp. nov.** Devonian, Siberia, p. 1161, figs., **Novoshilov, N. I. (1).**

†*Ctenaenigmatidae*, **fam. nov.**, p. 1161, **Novoshilov, N. I. (1).**

†*Discoleaia*, **gen. nov.**, Type species: *Leaia discoidea* Mitchell, *J. Fac. Sci. Univ. Tokyo* **II 9** p. 141, **Kobayashi, T.**

†*Eoleaia*, **gen. nov.**, Type sp.: *Pseudestheria leaiformis* Raymond, *J. Fac. Sci. Univ. Tokyo* **II 9** p. 140, **Kobayashi, T.**

*Estheria cycladoides*, growth, **Massal, L. (1), (2).**

†*Euestheria kyöngsangensis*, polymorphism, figs., **Kobayashi, T.**

†*Levenkia anatolii*, **gen. et sp. nov.** Devonian, U.S.S.R., p. 153, figs., *L. tustagensis*, *L. margaritae*, *L. aequipolleus*, *L. asiatica*, *L. torgalykensis*, **spp. nov.** Devonian, U.S.S.R., p. 154, **Novoshilov, N. I. (2).**

†*Livestheriinae*, **subfam. nov.**, p. 131, **Kobayashi, T.**

†*Mesoleaia*, **gen. nov.**, Type sp.: *Posidonia nodosocostata*, Giebel, *J. Fac. Sci. Univ. Tokyo* **II 9** p. 145, **Kobayashi, T.**

†*Nyasestheriella*, **gen. nov.**, Type species: *Estheriella nyasana* Newton, *J. Fac. Sci. Univ. Tokyo* **II 9** p. 138, **Kobayashi, T.**

†*Palaeolimnadiopsis ishimensis*, p. 311, *P. vilujensis*, p. 310, **spp. nov.** Permian, U.S.S.R., **Varentzov, I. M.**

†*Pseudestheria longa*, **sp. nov.** Permian, Dnieper-Donetz depression, Russia, p. 64, **Lapchik, F. E.**

†*Quadriasmussia*, **gen. nov.** for *Estheria hercynica* Kummerow, the type species, *J. Fac. Sci. Univ. Tokyo Sect. II 9* 1954: p. 133, **Kobayashi, T.**

†*Quadrileaia*, **gen. nov.**, Type sp.: *Leaia quadriradiata* Mitchell, *J. Fac. Sci. Univ. Tokyo* **II 9**, p. 144, fig. **Kobayashi, T.**

†*Rohdendorffium tuwaense*, **gen. et sp. nov.** Devonian, U.S.S.R., p. 153, figs., *R. sibiricum*, **sp. nov.**, p. 154, figs., Devonian, **Novoshilov, N. I. (2).**

†*Sphaerestheria belorussica*, **sp. nov.**, p. 64, Permian, Dnieper-Donetz depression, **Lapchik, F. E.**

†*Torgalykia ovjurenensis*, **gen. et sp. nov.** Devonian, U.S.S.R., p. 154, figs., **Novoshilov, N. I. (2).**

†*Trileaia*, **gen. nov.**, Type sp.: *Leaia belmontensis* Mitchell, *J. Fac. Sci. Univ. Tokyo* **II 9** p. 144, **Kobayashi, T.**

†*Vertexiinae*, **subfam. nov.**, p. 135, **Kobayashi, T.**

### NOTOSTRACA

Evolution of Notostraca, **Longhurst, A. R.**; Reproduction and Cytology, **Longhurst, A. R. (1).**

*Apus* spp., Number of apodous segments and sex ratio, **Tiwari, K. K.**

*Lepidurus apus*, *L. lynchi*, *L. arcticus*, *L. apus lubbocki*, descr., figs., *L. batesoni*, **sp. nov.**, p. 54, figs., Chilik Kul, Kazakstan, *Bull. Brit. Mus. (nat. hist.) Zool.* **3** 1955: **Longhurst, A. R. (2).**

*Triops cancriformis*, *T. granarius*, *T. australiensis*, *T. longicaudatus*, *T. cancri-*



*formis mauretanicus*, *T. c. simplex*, descr., figs., *T. longicaudatus intermedius*, **subsp. nov.**, New Caledonia, p. 47, fig., Review of genus, Bull. Brit. Mus. (nat. Hist.) Zool. **3** 1955 : **Longhurst**, A. R. (2) ; *T. cancriformis*, in Austria, **Vornatscher**, J.

### ACERCOSTRACA

†*Acercostraca*, **suborder nov.** near Notostraca for *Vachonia rozeri*, Paläont. Z. **29** 1955 : p. 127, **Lehmann**, W. M.

†*Vachonia rogeri*, **gen. et sp. nov.** Lower Devonian, Germany, p. 126, figs., Paläont. Z. **29** 1955 : **Lehmann**, W. M.

### ANOSTRACA

Miocene "fairy shrimps", record, **Palmer**, A. R. & **Bassett**, A. M.

Sex ratio in Anostraca, **Massal**, L. (3).

*Artemia salina*, effects of X-rays, **Grosch**, D. S. & **Erdman**, H. E.

*Branchinecta ferox*, *B. orientalis*, figs., **Kertész**, G.

*Chirocephalus grubei*, influence of environmental factors, **Kallinowsky**, H.

*Pristicephalus carnuntanus*, figs., **Kertész**, G.

*Streptocephalus javanensis*, **sp. nov.** Java, p. 249, figs., **Brehm**, V. (6).



